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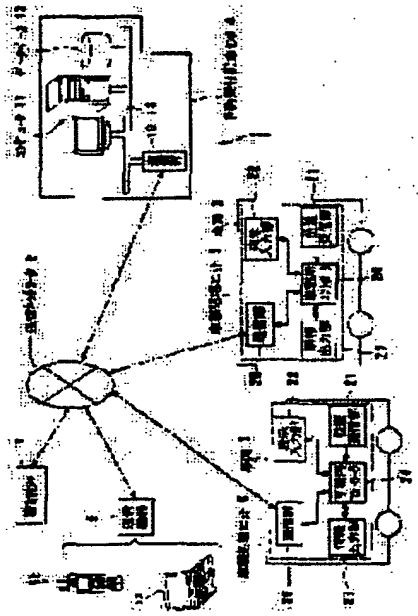
(54) METHOD AND SYSTEM FOR TRANSPORTATION, ACCEPTANCE PROCESSING SYSTEM, AND COMPUTER-READABLE STORAGE MEDIUM

(57)Abstract:
PROBLEM TO BE SOLVED: To improve convenience to passengers, operation efficiency, and transportation efficiency.
SOLUTION: This system is equipped with a reservation acceptance and vehicle allocation center 4 (communication part 10, computer 11, database 12, and bus 13). The center judges whether or not the same vehicle among plural vehicles 3 can be allocated to users according to pieces of service reservation information such as vehicle use date and time, place, destination, and single/joint ride desire information inputted from the users in a specific area, searches the best operation route of the same vehicle according to the service reservation information when the allocation is possible, searches the time of the arrival of the same vehicle at vehicle use places and the destination, provides reservation acceptance information including the time of the arrival of the same vehicle at the vehicle use places and destination for the users respectively, and stores the search results as operation schedule information. Further, the center informs the same vehicle side of the stored operation schedule information.



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* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
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CLAIMS

[Claim(s)]
[Claim 1] In the carriage system which provides a user with carrying service by making two or more cars in predetermined area operate The car utilization time inputted from the user side of the plurality in said predetermined area, The 1st decision means which judges whether the same car in said two or more cars can be allocated to said two or more users based on two or more service reservation information which includes a car utilization location, the destination, and independent / information wishing omnibus, respectively, When the same car can be allocated, as a result of this decision The car utilization time of each of two or more of said service reservation information, A retrieval means to ask for the arrival time of said same car to two or more car utilization locations and destinations based on the optimal operation root searched and searched for the optimal operation root of said same car based on a car utilization location and the destination, respectively, An offer means to offer the reservation reception information that reception of said service reservation information is expressed, to two or more corresponding users, respectively, The carriage system characterized by having a storage means to memorize the arrival time to said optimal operation root and said two or more car utilization locations, and the arrival time to said two or more destinations as schedule information, and an advice means to notify the memorized schedule information to said same car side.
[Claim 2] It is the carriage system according to claim 1 which said predetermined area is divided into plurality and performs said decision processing based on two or more service reservation information that said 1st decision means is inputted from the user side of the plurality in each of that area for every area.
[Claim 3] Said two or more service reservation information as an approach to pay said service utilization tariff Each reservation reception information which includes the information which chooses the account transfer method containing the account number, and is offered to said two or more users While the service utilization tariff set up according to the number of the arrival time to said two or more car utilization locations, the arrival time to said two or more destinations, and said two or more users is included, said storage means It responds to the information showing the service utilization which answered offer of said reservation reception information on said offer means, and was transmitted from two or more said user side. While memorizing the arrival time to said optimal operation root and said two or more car utilization locations, and the arrival time to said two or more destinations as schedule information When said two or more users are transported based on the schedule information notified by said advice means, respectively The carriage system according to claim 1 or 2 characterized by having the means which charges the service utilization tariff of the user concerned directly to the account corresponding to said account number of the financial institution of the user who has chosen said account transfer method.
[Claim 4] Said 1st decision means is a carriage system according to claim 3 characterized by that said same car can be allocated and judging when it includes the car utilization day when said two or more service reservation information is the same, and the information wishing omnibus, respectively.
[Claim 5] When new service reservation information is inputted from other user side after said schedule information was memorized by said storage means The 2nd decision means which judges whether the same car corresponding to said schedule information can be allocated to a user besides the above based on the service reservation information, The car utilization time of each of all service reservation information judged [that the same car can be allocated and] as a result of this decision when said same car was able to be allocated, A re-retrieval means to ask for the arrival time of said same car to two or more car utilization locations and destinations based on the optimal operation root which the optimal operation root of said same car was searched again, and was re-searched for it based on a car utilization location and the destination, respectively, A re-offer means to re-provide, respectively to all the users that judged [that the same car can

allocate cars and] the reservation reception information that reception of all the service reservation information judged [that said same car can be allocated and] was expressed, A restoration means to eliminate the schedule information memorized for said storage means, and to restore the arrival time to said optimal operation root and said two or more car utilization locations, and the arrival time to said two or more destinations as schedule information, The carriage system according to claim 4 characterized by having an advice means of re-to re-notify the schedule information which it restored to said same car side.
[Claim 6] In the carriage system which provides a user with carrying service by making two or more cars in predetermined area operate The car utilization time, the car utilization location which are inputted from the user side in said predetermined area, Independent / an omnibus decision means by which said user judges whether they are independent entrainment hope or omnibus entrainment hope based on the service reservation information which includes the destination, and independent / information wishing omnibus, respectively, When it is independent entrainment hope as a result of this decision, the car utilization time of the service reservation information concerned, A retrieval means to ask for the arrival time of said car to a car utilization location and the destination based on the optimal operation root searched and searched for the optimal operation root based on a car utilization location and the destination, An offer means to offer the reservation reception information that reception of said service reservation information is expressed, to said user, The carriage system characterized by having a storage means to memorize the arrival time to said optimal operation root and said car utilization location, and the arrival time to said destination as schedule information, and an advice means to notify the memorized schedule information to said car side.
[Claim 7] An input decision means to judge whether new service reservation information is inputted from other user side when it is omnibus entrainment hope as a result of decision of said independent / omnibus decision means, When new service reservation information is not inputted from other user side by this input decision means, said retrieval means The carriage system according to claim 6 characterized by searching said optimal operation root by treating the user of said omnibus entrainment hope as an independent entrainment hope.
[Claim 8] A decision means wishing omnibus entrainment to judge whether the new service reservation information concerned includes omnibus entrainment hope when new service reservation information is inputted from other user side as a result of decision of said input decision means, When said surveillance reservation information includes omnibus entrainment hope as a result of this decision The car utilization time, the car utilization location which are inputted from other said user and user side, An allocation-of-cars decision means to judge whether the same car in said two or more cars can be allocated to said user and other users based on two or more service reservation information which includes the destination, and independent / information wishing omnibus, respectively, As a result of decision of this allocation-of-cars decision means, when the same car can be allocated Based on said car utilization time of two or more service reservation information of each, a car utilization location, and the destination, the optimal operation root of said same car is searched. A retrieval means to ask for the arrival time of said same car to two or more car utilization locations and destinations based on the searched optimal operation root, respectively, An offer means to offer the reservation reception information that reception of two or more of said service reservation information is expressed, to said user and other users, respectively, The carriage system according to claim 7 characterized by having a storage means to memorize the arrival time to said optimal operation root and said two or more car utilization locations, and the arrival time to said two or more destinations as schedule information, and an advice means to notify the memorized schedule information to said same car side.
[Claim 9] Said each car has the communication link unit in which said 1st decision means and communication link are possible by the call device by which the driver can talk over the telephone with voice, and actuation of a driver. Said user A call signal is transmitted to said 1st decision means by the voice call device, and said service reservation information is inputted as speech information after said call signal reception. Said 1st decision means A location detection means to detect the location in said predetermined area of the user of the call signal dispatch origin concerned according to said transmitted call signal, A pickup means to take up the car which runs the location nearest to a detecting user location, It has a transfer means to transmit said call signal to the call device of the car which took up. The driver of the taken-up car concerned By connecting said call device and said user's voice call device, and talking over the telephone according to the transmitted call signal The content of the service reservation information that have recognized the content of the speech information showing said user's service reservation information, and said communication link unit has been operated and recognized The carriage system according to claim 1 characterized by being constituted so that it may transmit to the 1st decision means concerned as a signal which can recognize said 1st decision means.

[Claim 10] In the reception processing system which receives the service request of the call signal transmitted through the voice call device from the user, and voice by computer for reception processing installed in the reception center The call device by which two or more call members located in two or more locations can talk over the telephone with voice, It has said computer for reception processing, and the communication link unit which can be communicated by actuation of said call member. Said computer for reception processing A location detection means to detect the location of the user of the call signal dispatch origin concerned according to said call signal, A pickup means to take up the call member nearest to a detecting-among said two or more call members user location, It has a transfer means to transmit said call signal to the call device of the call member which took up. The taken-up call member concerned By connecting said call device and said user's voice call device, and talking over the telephone according to the transmitted call signal The reception processing system characterized by being constituted so that the content of the service request which has recognized the content of the service request said user's voice, and has operated and recognized said communication link unit may be transmitted to the computer for reception processing concerned as a signal which can recognize said computer for reception processing.
[Claim 11] In the carriage approach of providing a user with carrying service by making two or more cars in predetermined area operating The car utilization time inputted from the user side of the plurality in said predetermined area, The step which judges whether the same car in said two or more cars can be allocated to said two or more users based on two or more service reservation information which includes a car utilization location, the destination, and independent / information wishing omnibus, respectively, When the same car can be allocated, as a result of this decision step The car utilization time of each of two or more of said service reservation information, The step which asks for the arrival time of said same car to two or more car utilization locations and destinations based on the optimal operation root searched and searched for the optimal operation root of said same car based on a car utilization location and the destination, respectively, The step which offers the reservation reception information that reception of two or more of said service reservation information is expressed, to two or more corresponding users, respectively, The carriage approach characterized by having the step which memorizes the arrival time to said optimal operation root and said two or more car utilization locations, and the arrival time to said two or more destinations as schedule information, and the step which notifies the memorized schedule information to said same car side.
[Claim 12] In the storage in which the read of the computer which performs processing which provides a user with carrying service by making two or more cars in predetermined area operate is possible The car utilization time inputted from the user side of the plurality in said predetermined area, A means to make a computer judge whether the same car in said two or more cars can be allocated to said two or more users based on two or more service reservation information which includes a car utilization location, the destination, and independent / information wishing omnibus, respectively, When the same car can be allocated, as a result of this decision The car utilization time of each of two or more of said service reservation information, Said computer is made to search the optimal operation root of said same car based on a car utilization location and the destination. A means to make said computer asked for the arrival time of said same car to two or more car utilization locations and destinations based on the optimal operation root which was made to search and was obtained, respectively, An offer means to make the reservation reception information that reception of two or more of said service reservation information is expressed offer to two or more users who correspond by said computer, respectively, The means stored in said computer by making the arrival time to said optimal operation root and said two or more car utilization locations, and the arrival time to said two or more destinations into schedule information, The storage in which the read of the computer characterized by having an advice means to make said computer notify the memorized schedule information to said same car side is possible.

[Translation done.]

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Field of the Invention] This invention relates to the storage in which the read of the carriage approach which made it possible to receive entrainment reservation of two or more users who receive the same car, and to allocate a car, a system, and a computer is possible in the carriage approach and system which transport the PAX and take a tariff by making cars, such as a bus, operate.
[0002] Furthermore, this invention relates the service request of voice, such as reservation sent from speech information communication equipment, such as a telephone, and a purchase application of goods, to the reception processing system in which reception processing is possible in the uninhabited reception center.
[0003]
[Description of the Prior Art] The bus business which is the big column of current and a PAX carriage system on land is an approval system, and the carrier beam bus entrepreneur is developing the bus business for approval from government.
[0004] In the conventional bus business, by making it run, making it stop at the time of day beforehand set to the stop fixed on the operation root along the operation root which was able to define the bus beforehand, it transports to the stop of a request of the PAX who stands by at a stop, and the tariff for the carriage is taken.
[0005] Moreover, in the taxi business which is a column on a par with the bus business in a PAX carriage system on land, one PAX (lot) is transported for every PAX to the location of each request, and the tariff for the carriage is taken.
[0006] On the other hand, there is a speech information reception processing system which receives the service request by sending service requests, such as boarding reservation of a passenger transport, reservation of a concert ticket, and a goods purchase application, to a reception center with voice through a telephone etc. conventionally.
[0007] In this speech information reception system, reception processing of that service request is carried out by always allotting many operators to the reception center and conversing with a service user.
[0008]
[Problem(s) to be Solved by the Invention] However, in the PAX carriage system by the conventional bus, since a bus ran along the always decided operation root based on Kursbuch decided beforehand, every time receiving the entrainment reservation from the PAX was completely performed, it was not broken, but the fixed limitation had been generated in the improvement in convenience by the side of the PAX.
[0009] Moreover, since it was the same, it is impossible to also make buses allocate cars and run at the PAX's location of choice and time of day of choice, and it did not result in improvement in the convenience by the side of the PAX too.
[0010] Furthermore, in the PAX carriage system by the conventional bus, as for the bus, the operation root corresponding to the stop which the PAX does not stand by, for example and alighting hope does not have, either must also run, and did not always come to raise operational efficiency from the same reason.
[0011] And according to the PAX carriage system by the conventional taxi, even if entrainment hope was obtained from other PAX while transporting a certain PAX, since the PAX was not able to be made to ride together, it did not come to raise carriage effectiveness.
[0012] On the other hand, in the conventional speech information reception processing system, many operators had to be stationed permanently at the reception center and the reception processing-system management cost containing a labor cost was increasing.

[0013] It was made in order that this invention may solve the trouble of a majority of PAX carriage systems by the bus mentioned above, and above-mentioned PAX carriage systems by the taxi, and the allocation of cars of the car for carriage to the omnibus of entrainment reservation of the car for carriage and two or more PAX, and the PAX's car utilization location and utilization time of day enables, respectively, and it sets it as the 1st object to realize improvement in the convenience, the operational efficiency, and the carriage effectiveness to the PAX, respectively.
[0014] Moreover, this invention was made in view of the situation mentioned above, and reception processing of much speech information of it is enabled, managing reception center parking operation by uninhabited, and let it be the 2nd object to reduce substantially the management cost of the speech information reception processing system containing a labor cost.
[0015]
[Means for Solving the Problem] In our country, it ages 2001, deregulation of a carriage business law is enforced, and the bus business run by current and the approval system changes to a notification system. Therefore, in addition to the current existing bus entrepreneur, it is expected that the entrepreneur of various types of industry, such as a taxi entrepreneur and a PD entrepreneur, enters into a bus business using a notification system.
[0016] Therefore, in the PAX carriage business the competition intensification under a notification system is expected to be, although it is necessary to solve the trouble of the PAX carriage system by the bus mentioned above, or the PAX carriage system by the taxi, and to take the part to improvement in the PAX's convenience, the improvement in operational efficiency, and improvement in carriage effectiveness, the actual condition is not invented at all about the concrete policy.
[0017] Then, according to invention according to claim 1 produced in order to attain the object mentioned above based on such a background In the carriage system which provides a user with carrying service by making two or more cars in predetermined area operate The car utilization time inputted from the user side of the plurality in said predetermined area, The 1st decision means which judges whether the same car in said two or more cars can be allocated to said two or more users based on two or more service reservation information which includes a car utilization location, the destination, and independent / information wishing omnibus, respectively, When the same car can be allocated, as a result of this decision The car utilization time of each of two or more of said service reservation information, A retrieval means to ask for the arrival time of said same car to two or more car utilization locations and destinations based on the optimal operation root searched and searched for the optimal operation root of said same car based on a car utilization location and the destination, respectively, An offer means to offer the reservation reception information that reception of said service reservation information is expressed, to two or more corresponding users, respectively, It has a storage means to memorize the arrival time to said optimal operation root and said two or more car utilization locations, and the arrival time to said two or more destinations as schedule information, and an advice means to notify the memorized schedule information to said same car side.
[0018] In claim 2, said predetermined area is divided into plurality and said 1st decision means performs said decision processing based on two or more service reservation information that it is inputted from the user side of the plurality in each of that area, for every area.
[0019] In claim 3 said two or more service reservation information Each reservation reception information which includes the information which chooses the account transfer method containing the account number as an approach to pay said service utilization tariff, and is offered to said two or more users While the service utilization tariff set up according to the number of the arrival time to said two or more car utilization locations, the arrival time to said two or more destinations, and said two or more users is included, said storage means It responds to the information showing the service utilization which answered offer of said reservation reception information on said offer means, and was transmitted from two or more said user side. While memorizing the arrival time to said optimal operation root and said two or more car utilization locations, and the arrival time to said two or more destinations as schedule information When said two or more users are transported based on the schedule information notified by said advice means, respectively, it has the means which charges the service utilization tariff of the user concerned directly to the account corresponding to said account number of the financial institution of the user who has chosen said account transfer method.
[0020] In claim 4, said 1st decision means is judged [that said same car can be allocated and], when it includes the car utilization day when said two or more service reservation information is the same, and the information wishing omnibus, respectively.

[0021] When new service reservation information is inputted from other user side in claim 5 after said schedule information was memorized by said storage means The 2nd decision means which judges whether the same car corresponding to said schedule information can be allocated to a user besides the above based on the service reservation information, The car utilization time of each of all service reservation information judged [that the same car can be allocated and] as a result of this decision when said same car was able to be allocated, A re-retrieval means to ask for the arrival time of said same car to two or more car utilization locations and destinations based on the optimal operation root which the optimal operation root of said same car was searched again, and was re-searched for it based on a car utilization location and the destination, respectively, A re-offer means to re-provide, respectively to all the users that judged [that the same car can allocate cars and] the reservation reception information that reception of all the service reservation information judged [that said same car can be allocated and] was expressed, A restoration means to eliminate the schedule information memorized for said storage means, and to restore the arrival time to said optimal operation root and said two or more car utilization locations, and the arrival time to said two or more destinations as schedule information, It has an advice means of re-to re-notify the schedule information which it restored to said same car side.

[0022] Moreover, according to invention according to claim 6 produced in order to attain the object mentioned above based on the above-mentioned background In the carriage system which provides a user with carrying service by making two or more cars in predetermined area operate The car utilization time, the car utilization location which are inputted from the user side in said predetermined area, Independent / an omnibus decision means by which said user judges whether they are independent entrainment hope or omnibus entrainment hope based on the service reservation information which includes the destination, and independent / information wishing omnibus, respectively, When it is independent entrainment hope as a result of this decision, the car utilization time of the service reservation information concerned, A retrieval means to ask for the arrival time of said car to a car utilization location and the destination based on the optimal operation root searched and searched for the optimal operation root based on a car utilization location and the destination, An offer means to offer the reservation reception information that reception of said service reservation information is expressed, to said user, It has a storage means to memorize the arrival time to said optimal operation root and said car utilization location, and the arrival time to said destination as schedule information, and an advice means to notify the memorized schedule information to said car side.

[0023] When new service reservation information is not inputted from other user side in claim 7 by input decision means whether service reservation information new from other user side when it is omnibus entrainment hope as a result of decision of said independent / omnibus decision means is inputted, and judge, and this input decision means, said retrieval means searches said optimal operation root by treating considering the user of said omnibus entrainment hope as an independent entrainment hope.

[0024] A decision means wishing omnibus entrainment to judge whether the new service reservation information concerned includes omnibus entrainment hope in claim 8 when new service reservation information is inputted from other user side as a result of decision of said input decision means, When said surveillance reservation information includes omnibus entrainment hope as a result of this decision The car utilization time, the car utilization location which are inputted from other said user and user side, An allocation-of-cars decision means to judge whether the same car in said two or more cars can be allocated to said user and other users based on two or more service reservation information which includes the destination, and independent / information wishing omnibus, respectively, As a result of decision of this allocation-of-cars decision means, when the same car can be allocated Based on said car utilization time of two or more service reservation information of each, a car utilization location, and the destination, the optimal operation root of said same car is searched. A retrieval means to ask for the arrival time of said same car to two or more car utilization locations and destinations based on the searched optimal operation root, respectively, An offer means to offer the reservation reception information that reception of two or more of said service reservation information is expressed, to said user and other users, respectively, It has a storage means to memorize the arrival time to said optimal operation root and said two or more car utilization locations, and the arrival time to said two or more destinations as schedule information, and an advice means to notify the memorized schedule information to said same car side.

[0025] In claim 9, said each car has the communication link unit in which said 1st decision means and communication link are possible by the call device by which the driver can talk over the telephone with voice, and actuation of a driver. Said user A call signal is transmitted to said 1st decision means by the voice call

device, and said service reservation information is inputted as speech information after said call signal reception. Said 1st decision means A location detection means to detect the location in said predetermined area of the user of the call signal dispatch origin concerned according to said transmitted call signal, A pickup means to take up the car which runs the location nearest to a detecting user location, It has a transfer means to transmit said call signal to the call device of the car which took up. The driver of the taken-up car concerned By connecting said call device and said user's voice call device, and talking over the telephone according to the transmitted call signal It is constituted so that the content of the service reservation information that have recognized the content of the speech information showing said user's service reservation information, and said communication link unit has been operated and recognized may be transmitted to the 1st decision means concerned as a signal which can recognize said 1st decision means.

[0026] Furthermore, according to invention according to claim 10 produced in order to attain the object mentioned above based on the above-mentioned background In the reception processing system which receives the service request of the call signal transmitted through the voice call device from the user, and voice by computer for reception processing installed in the reception center The call device by which two or more call members located in two or more locations can talk over the telephone with voice, It has said computer for reception processing, and the communication link unit which can be communicated by actuation of said call member. Said computer for reception processing A location detection means to detect the location of the user of the call signal dispatch origin concerned according to said call signal, A pickup means to take up the call member nearest to a detecting-among said two or more call members user location, It has a transfer means to transmit said call signal to the call device of the call member which took up. The taken-up call member concerned By connecting said call device and said user's voice call device, and talking over the telephone according to the transmitted call signal It is constituted so that the content of the service request which has recognized the content of the service request said user's voice, and has operated and recognized said communication link unit may be transmitted to the computer for reception processing concerned as a signal which can recognize said computer for reception processing.

[0027] And according to invention according to claim 11 produced in order to attain the object mentioned above based on the above-mentioned background In the carriage approach of providing a user with carrying service by making two or more cars in predetermined area operating The car utilization time inputted from the user side of the plurality in said predetermined area, The step which judges whether the same car in said two or more cars can be allocated to said two or more users based on two or more service reservation information which includes a car utilization location, the destination, and independent / information wishing omnibus, respectively, When the same car can be allocated, as a result of this decision step The car utilization time of each of two or more of said service reservation information, The step which asks for the arrival time of said same car to two or more car utilization locations and destinations based on the optimal operation root searched and searched for the optimal operation root of said same car based on a car utilization location and the destination, respectively, The step which offers the reservation reception information that reception of two or more of said service reservation information is expressed, to two or more corresponding users, respectively, It has the step which memorizes the arrival time to said optimal operation root and said two or more car utilization locations, and the arrival time to said two or more destinations as schedule information, and the step which notifies the memorized schedule information to said same car side.

[0028] According to invention according to claim 12 produced on the other hand in order to attain the object mentioned above based on the above-mentioned background In the storage in which the read of the computer which performs processing which provides a user with carrying service by making two or more cars in predetermined area operate is possible The car utilization time inputted from the user side of the plurality in said predetermined area, A means to make a computer judge whether the same car in said two or more cars can be allocated to said two or more users based on two or more service reservation information which includes a car utilization location, the destination, and independent / information wishing omnibus, respectively, When the same car can be allocated, as a result of this decision The car utilization time of each of two or more of said service reservation information, Said computer is made to search the optimal operation root of said same car based on a car utilization location and the destination. A means to make said computer asked for the arrival time of said same car to two or more car utilization locations and destinations based on the optimal operation root which was made to search and was obtained, respectively, An offer means to make the reservation reception information that reception of two or more of said service reservation information is expressed offer to two or more users who correspond by said computer, respectively, It has the means stored

in said computer by making the arrival time to said optimal operation root and said two or more car utilization locations, and the arrival time to said two or more destinations into schedule information, and an advice means to make said computer notify the memorized schedule information to said same car side.
[0029]
[Embodiment of the Invention] The gestalt of operation of the carriage approach by the car of this invention and a system, a reservation reception art and a system, a reception art, and a system is explained with reference to an accompanying drawing.
[0030] Drawing 1 is the block diagram showing the outline configuration of the carriage system containing the reservation reception processing system concerning the gestalt of operation of this invention.
[0031] For example, the inside of the area of specification, such as a certain cities, towns and villages whole region or an area over two or more cities, towns and villages, is made into an allocation-of-cars area. according to drawing 1 — the carriage system 1 — It responds to operation service reservation from two or more operation service users (PAX) who can set in this allocation-of-cars area. It is the system which transports a carriage service user (PAX) in an allocation-of-cars area by making it run the car for carriage (for example, for a micro bus, a wagon vehicle, a subcompact, etc. to only be called a car below;), permitting the omnibus of a maximum of three affairs (3 sets) as opposed to the same car.
[0032] Namely, an information communication link is possible for the carriage system 1 through independent or the communication line (communication networks, such as the Internet) 2 constituted by combining more than one in the telephone line, ISDN, a communication link dedicated line, etc. The reservation reception allocation-of-cars center 4 for performing automatically reservation reception processing of two or more cars 3, allocation-of-cars processing, and reservation reception / allocation-of-cars management processing, By operating telephone 5b containing terminal 5a which contains Personal Digital Assistants, such as a pocket mold computer, from the inside of an allocation-of-cars area, or a cellular phone etc., and carrying out an information communication link with the reservation reception allocation-of-cars center 4 through a communication network 2 It was carried in the communication equipment 5 for reserving carrying service by the car 3, and two or more cars of each, and has the mounted processing unit 6 in which an information communication link is possible through the communication network 2.
[0033] Moreover, the carriage system 1 is equipped with storage and the control center 7 which manages and sends the road traffic information in the allocation-of-cars area R to the reservation reception allocation-of-cars center 4 based on the detection information sent one by one from the sensor group which was installed on the route of the allocation-of-cars area R in the road traffic information in the allocation-of-cars area R and which is not illustrated at least.
[0034] Drawing 2 is drawing showing the allocation-of-cars area R in the carriage system 1 of this operation gestalt, and reservation reception allocation-of-cars center 4 grade.
[0035] As shown in drawing 2 , the allocation-of-cars area R is divided into two or more allocation-of-cars area (in drawing 2 , it considers as 3 area), and the reservation reception allocation-of-cars center 4 is installed in the center of abbreviation of the allocation-of-cars area R.
[0036] Moreover, the car 3 which the waiting circle W1 for making two or more cars 3 stand by - W3 are installed in the divided each allocation-of-cars area A1 - A3, and stands by to each waiting circle W1 - W3 mainly operates the inside of the corresponding allocation-of-cars area A1 - A3, and offers fine carrying service for the allocation-of-cars area A1 - every A3.
[0037] The car 3 which stands by by each waiting circle W1 in each allocation-of-cars area A1 - A3 - W3 runs in the area which chooses any one of the following 3 operation gestalten defined beforehand, and corresponds.

[0038] That is, as shown in drawing 3 (only the allocation-of-cars area A1 is shown), each car 3 runs basic operation root [which was beforehand set up in area] M1 - M3 top fundamentally, and stops at the 1st operation gestalt on the stay point P for PAX getting on and off beforehand set as the predetermined location on each operation root M1 - M3.
[0039] The basic operation roots M1-M3 in this 1st operation gestalt are bases to the last, and are changed according to the PAX's reservation status. That is, it is possible to bypass a certain stay point P (with no PAX getting on and off), and to face to those with entrainment reservation or the stay point with the PAX which gets off, or to carry out short distance part detour transit (to refer to sign D in drawing) from the basic operation roots M1-M3, and to also make the PAX get on and off in locations other than basic operation root M1 - M3 (stay point P).

[0040] Each car 3 runs in area freely (free), takes up the PAX in the PAX's assignment entrainment location, stops at the PAX's assignment alighting location, and takes down the PAX to the 2nd operation gestalt.
[0041] Moreover, the 3rd operation gestalt uses together the 1st operation gestalt and the 2nd operation gestalt, and assigns the car it runs with the 1st operation gestalt among two or more cars 3, and the car 3 it runs with the 2nd operation gestalt by the ratio according to the PAX's reservation status.
[0042] As for whether it is desirable to adopt which operation gestalt, it is desirable to change also with the magnitude of the allocation-of-cars area R and each magnitude of the allocation-of-cars area W1 - W3, and to adopt the operation gestalt 2 or 3, if each allocation-of-cars area W1 - W3 are comparatively narrow, and it is desirable to, adopt the operation gestalt 1 or 3 on the other hand, if each allocation-of-cars area W1 - W3 are extensive.
[0043] Even when which operation gestalt is adopted, in the carriage system 1 of this operation form gestalt, the allocation-of-cars area R is divided into plurality (this operation gestalt three), and each allocation-of-cars area A1 - A3 are constituted, and it is devising so that a waiting circle may be installed in each allocation-of-cars area A1 - A3 and every area may be allocated promptly and smoothly.
[0044] Moreover, when the 2nd operation gestalt is adopted, allocation-of-cars operation of the car can just be carried out to the location according to a demand (demand) of the user in each allocation-of-cars area A1 - A3.
[0045] Since two or more basic operation roots are prepared for every area and detour transit from the basic operation root is enabled even when the 1st operation gestalt is adopted, furthermore, the user in each area It is not necessary to move from bus utilization starting positions, such as a house like the conventional bus, to the greatly distant stop, and since allocation-of-cars operation of the car 3 can be carried out to near the location wishing carrying service utilization initiation which the abbreviation user himself wishes and demands, the demand (demand) of a user can be met.
[0046] On the other hand, the user using the carrying service of the carriage system 1 By operating the terminal 5a and communicating with the reservation reception allocation-of-cars center 4, when terminal 5a is used as communication equipment 5 (it communicating through the homepage of the carriage system 1 etc.) The screen I for carrying service reservation including the carrying service reservation information input area A1-A8 is shown to the monitor (display) of terminal 5a by processing of the reservation reception allocation-of-cars center 4 (refer to drawing 4).
[0047] According to drawing 4 , in Screen I for carrying service reservation The input area AR1-AR3 for a user's individual humanity news [name, address, and the telephone number (TEL)] input, As a user's carrying service assignment information, pick up time (car utilization time) and a location (car utilization location; operation gestalt [of ** a 1st] -> the desired stay point P and entrainment time amount; operation gestalt [of ** a 2nd] -> the location wishing entrainment and time amount of choice), the destination, a utilization staff, the operation approach (independent entrainment hope or omnibus entrainment hope), and the tariff settlement-of-accounts approach (account draw down —) The carrying service assignment information input area AR4-AR8 for inputting a cash basis is formed. Or a user Terminal 5a (the pointing device and keyboard of a terminal) is operated, and it inputs into the input area AR1-AR8 which corresponds carrying service reservation information (individual humanity news and carrying service assignment information), respectively. In addition, it is also possible to form for [which carried out member registration mentioned later] users as input area of the pull down menu method showing each input area AR1-AR8 on Screen I for carrying service reservation in drawing 4 , and it enables a user to input individual humanity news and carrying service information more simply.
[0048] And by a user's checking the carrying service reservation information that it was inputted into each area AR1-AR8, and clicking transmission PB1, the above-mentioned carrying service reservation information is decided by the content of an input, and the fixed carrying service reservation information is transmitted to the reservation reception allocation-of-cars center 4 through a communication network 2 by processing of terminal 5a.
[0049] In addition, when canceling the content of reservation inputted once, a user clicks cancellation PB2 and should just input again.
[0050] That is, in receiving carrying service, in this operation gestalt, a user can wish to receive carrying service in an omnibus format by specifying and inputting omnibus entrainment hope as the operation approach oneself.
[0051] In addition, in choosing account draw down from a financial institution as the tariff settlement-of-

accounts approach, it also transmits the account number of the financial institution collectively.
[0052] Moreover, although you may transmit whenever individual humanity news, such as a name and an address, uses carrying service, it is also possible to receive the authentication information which a user registers as a carrying service utilization member of the carriage system 1 at the 1st utilization time (at the time of reservation termination), and contains Member ID, a password, etc. from the reservation reception allocation-of-cars center 4. By carrying out member registration, in the carrying service utilization time of the 2nd henceforth, the user is possible also for transmitting only authentication information and carrying service assignment information, and can save the time and effort which inputs individual humanity news.
[0053] On the other hand, telephone 5b, such as a cellular phone which is communication equipment It has the data communication facility and the data display function through a communication network 2 (Internet). The homepage address of the reservation reception allocation-of-cars center 4 is beforehand registered into telephone 5b. By searching that address, displaying Screen I for carrying service reservation of the reservation reception allocation-of-cars center 4 on the display of telephone 5b, and inputting carrying service reservation information on this screen I for carrying service reservation The same carrying service reservation information input process as terminal 5a can be performed.
[0054] And as the reservation reception allocation-of-cars center 4 is managed by the staff (reservation reception operator absence) of uninhabited or necessary minimum and it is shown in drawing 1 The function which carries out reception processing of the carrying service reservation information (individual humanity news, service assignment information) transmitted by the user automatically, and is memorized and managed in a database for the allocation-of-cars area A1 - every A3, It has the function to manage the function which allocates automatically the car 3 in each allocation-of-cars area A1 - A3 based on the carrying service reservation information memorized by the road traffic information and the database in the allocation-of-cars area R sent one by one from the control center 7, and the allocation-of-cars situation of each car 3, respectively.
[0055] With namely, the communications department 10 which the reservation reception allocation-of-cars center 4 gives interface processing to perform the information communication link between the self-center 4 and a communication network 2 convenient The memory built-in computer 11 for the above-mentioned reservation information management processing, allocation-of-cars processing, and allocation-of-cars situation management processing activation, It has the database 12 for memorizing the tariff information beforehand set up according to a member registered user's individual humanity news, reservation information by which reception processing was carried out, allocation-of-cars situation, and operation approach, respectively, and each [these] components 10-12 interconnect possible [a communication link] by bus 13.
[0056] For example, it is set up with minimum charge (for example, 300 yen) by omnibus of the maximum number of cases (this operation gestalt three affairs), it is set up like minimum charge x3 (for example, 900 yen) by two-affair omnibus by minimum charge x 1.5 (for example, 450 yen) or 1-affair omnibus (independent utilization), corresponding to the number of omnibus, and tariff information is memorized by the database 12. In addition, as for the tariff of independent utilization, it is desirable to set it as a price [a little] cheaper than the starting fare at the time of using a taxi.
[0057] With the communications department 20 which, on the other hand, performs interface processing to perform the information communication link between the self-mount processing unit 6 and a communication network 2 convenient as the mounted processing unit 6 of each car 3 is shown in drawing 1 With for example, the positional information receive section 21 which receives positional information, such as a GPS signal transmitted from three GPS Satellites, and asks for the transit location of the self-car 3 The display-input section 22 which can input data and a command on the screen which has a monitor and was displayed on the monitor, It has the information output section 23 in which an output is possible, and the controller 24 for mount for carrying out generalization control of the mounted processing unit 6 whole through the monitor of the display-input section 22 by making at least one of speech information, and images and text into navigation information.
[0058] The computer 11 of the reservation reception allocation-of-cars center 4 operates according to the program built-in computers, such as ROM and RAM, were remembered to be by the storage in which read is possible. Namely, the computer 11 Based on the positional information of each car 3 in each allocation-of-cars area A1 as for which is received by the positional information receive section 21 of the mounted processing unit 6, and sequential transmission is carried out by transmitting processing of a controller 24 through a communication network 2 - A3, the current position of each car 3 is memorized and managed in a

database 12. If new carrying service reservation information is transmitted via a communication network 2 by communication equipment 5 actuation of a user, the carrying service reservation information will be received and the reservation information will be memorized in a database 12 for every allocation-of-cars area.
[0059] And a computer 11 responds to new carrying service reservation information reception / storage processing timing for the allocation-of-cars area A1 - every A3. the road traffic information in corresponding allocation-of-cars area, the car currency information memorized by the database 12, and carrying service reservation information (pick up time and location information —) Based on the destination, the operation approach, etc., the stopover and **** time of day on the operation root for allocating at least one set of two or more cars 3 in this allocation-of-cars area the optimal to the carriage service user in the allocation-of-cars area (subscriber) and the operation root are searched, respectively. The schedule information containing the searched operation root, the stopover, and **** time of day is updated for the allocation-of-cars area A1 - every A3 to a database 12.
[0060] Next, concrete actuation and processing of the carriage system concerning this operation gestalt are explained to a detail using drawing 5 - drawing 8 .
[0061] For example, it rides on predetermined time at a car 3 from the stay point P (in the case of the operation gestalten 1/3) nearest to the house (in the case of the operation gestalten 2/3) or house of the allocation-of-cars area A1. The user who wants to move on joint account to the destination in the allocation-of-cars area A1 For example, operate the communication equipment 5 installed in the house, such as terminal 5a, and Screen I for carrying service reservation is minded. Individual humanity news (in the case of the first reservation) or authentication information (in the case of the registered member), and carrying service assignment information {pick up time and a location (house), The destination, a utilization staff, operation information (omnibus hope), and the tariff settlement-of-accounts approach (For example, a user's account number is also included by account draw down) The carrying service reservation information containing} is inputted, and the carrying service reservation information that it inputted is transmitted to the reservation reception allocation-of-cars center 4 through a communication network 2 (drawing 5 ; step S1).
[0062] The computer 11 of the reservation reception allocation-of-cars center 4 receives the carrying service reservation information transmitted from communication equipment 5 through the communications department 10, and judges omnibus hope or independent entrainment hope based on the received carrying service reservation information (step S2).
[0063] Now, since it is omnibus hope, decision of step S2 serves as "omnibus", and a computer 11 registers the sent carrying service reservation information as 1st group's omnibus candidate's carrying service reservation information (step S3).
[0064] Subsequently, time amount standby is carried out and a computer 11 judges [which set up beforehand after registration processing] whether carrying service reservation information was transmitted as the operation approach from other users in the same allocation-of-cars area A1 (step S4).
[0065] When operation service reservation information is not transmitted from other users into a standby time as a result of this decision, (step S4->NO) and a computer 11 update the carrying service reservation information of the omnibus candidate of the 1st group of the above to the carrying service reservation information on independent entrainment hope, consider that it is independent entrainment hope, and shift to processing of step S16.
[0066] When carrying service reservation information has been transmitted from other users as a result of decision of step S4 (step S4-> YES), a computer 11 receives the transmitted carrying service reservation information, and judges omnibus hope or independent entrainment hope based on the received carrying service reservation information (step S5).
[0067] When it is the decision result of this step S5, and omnibus hope (step S5-> "omnibus"), a computer 11 1st group's omnibus candidate's carrying service reservation information (pick up time, a location, and destination) registered into carrying service reservation information (pick up time, location, and destination) and database 12 of other users (omnibus candidate) who received is collated (step S6). Whether the same car 3 can be allocated and all omnibus candidates' reservation information can be realized It judges based on factors — whether it is a date with the same pick up day, or is a standby time permissible to the pick up time amount of hope in whether it is over the number of the maximum omnibus, whether the destination and the pick up ground are the same directions, and whether the destination and the pick up ground are the neighborhoods — (step S7).
[0068] As a result of this decision, to the newest omnibus candidate and the 1st group's omnibus candidate,

by the same car 3, when cars cannot be allocated, (step S7->NO) and a computer 11 register the carrying service reservation information of the newest omnibus candidate who received by processing of step S5 as 2nd group's omnibus candidate's carrying service reservation information (step S8), and shift to processing of step S4.

[0069] In the following and step S4-S8 a computer 11 The carrying service reservation information of the omnibus candidate for every group registered into the database 12, The newest carrying service reservation information in the same allocation-of-cars area A1 sent by the user in the standby time is collated. It judges whether the newest omnibus candidate can be allocated by the same car 3 as which group's omnibus candidate. When it is impossible to allocate cars by the same car 3 also in which group, the newest omnibus candidate's carrying service reservation information is registered as new group's omnibus candidate's carrying service reservation information.

[0070] The result of on the other hand having collated the carrying service reservation information and the carrying service reservation information of each group's omnibus candidate which have been transmitted by the omnibus candidate newest by step S4 in step S7, When the same car 3 as a predetermined group's omnibus candidate can be allocated, (step S7->YES) and a computer 11 The carrying service reservation information transmitted by the newest omnibus candidate is memorized in a database 12 as a predetermined group's carrying service reservation information. The optimal operation root for allocating any one of the cars 3 it is running in the car (vacant taxi) 3 which stands by in a waiting circle W1, or the allocation-of-cars area A1 to two or more omnibus candidates of a predetermined group is planned.

[0071] Namely, the currency information of each car 3 in the allocation-of-cars area A1 where a computer 11 includes a waiting circle W1, It is based on of two or more omnibus candidates' of a predetermined group's carrying service reservation information (pick up time, a location, and destination) registered into the road traffic information (the delay information, accident information, work information, etc.) and the database 12 in the allocation-of-cars area A1. The car 3 which can be dropped in at of two or more omnibus candidates' of a predetermined group's pick up time and location is extracted. The optimal operation root, i.e., each omnibus candidate's pick up location in pick up time, While destinations, those arrival time, and a transit path (route) refer to the operation root which is most in agreement with each omnibus candidate's carrying service reservation information for the above-mentioned road traffic information etc., it asks for the arrival time to each pick up location and destination based on the created operation root which carried out planned creation (step S9).

[0072] subsequently, a computer 11 transmits the reservation reception information (image information) containing the existence (is carrying service used at the above-mentioned arrival-time and tariff or not?) selection information and the reservation reception message of the arrival time to the pick-up location and the destination which carried out reading appearance of the tariff corresponding to the number of omnibus in this time, and asked for it, the tariff which carried out reading appearance, and carrying-service utilization to each omnibus candidate's communication equipment 5 through the communications department 10 and a communication network 2, respectively (step S10). [database / 12]

[0073] Drawing 6 shows an example of the reservation reception information displayed on the display of each omnibus candidate's communication equipment 5 by processing of step S10. In addition, the destination arrival time is made and the tariff is made [pick up time] into 450 yen for the pick up location arrival time in drawing 6 at 13:30 for 13:00 minutes on Sun., February 20.

[0074] In drawing 6 , PB4 showing PB3 which means carrying out service utilization as the above-mentioned service utilization existence selection information, and not carrying out service utilization is formed in reservation reception information, respectively, a carriage service user (omnibus candidate) can check the reservation reception information by which the image display output was carried out at communication equipment 5, and it can choose [whether carrying service is used according to a check result, and].

[0075] Namely, if a user (omnibus candidate) is satisfied with the reservation reception result displayed on the display of communication equipment 5 Processing of communication equipment 5 is minded by clicking the service utilization PB3. Service utilization heartless news is transmitted to the reservation reception allocation-of-cars center 4 through processing of communication equipment 5 by transmitting service utilization information to the reservation reception allocation-of-cars center 4, and clicking PB4, in being dissatisfied to a reservation reception result.

[0076] At this time, the computer 11 of the reservation reception allocation-of-cars center 4 It has judged [which of carrying service utilization information and service utilization heartless news, or] whether it is

transmitted from each omnibus candidate (step S11). When carrying service utilization heartless news has been transmitted from at least one omnibus candidate, as a result of this decision (with no step S11 -> utilization) and a computer 11 An omnibus candidate's carrying service reservation information that carrying service utilization heartless news was transmitted is eliminated from a database 12 (step S12). Collating processing with the newest carrying service reservation information sent to processing of step S4 at return and a degree and the carrying service reservation information of the omnibus candidate for every registered group is performed.

[0077] When carrying service utilization information has been transmitted from all omnibus candidates, on the other hand, as a result of decision of step S11 (those with step S11 -> utilization), and a computer 11 The arrival time to each pick up location and destination based on the operation root created by step S9, and the operation root in pick up time It memorizes in a database 12 as schedule information on the corresponding car 3 (step S13). As opposed to the mounted unit 6 of the car 3 which corresponds the schedule information and the cash-basis instruction (cash-basis command which contains the name when at least one PAX has chosen the cash basis) which were memorized It notifies on-line through the communications department 10 and a communication network 2 (step S14), and shifts to processing of step S4.

[0078] A computer 11 re-creates schedule information based on the carrying service information of the omnibus candidate of all the groups in a standby time according to that newest carrying service reservation information, whenever the carrying service reservation information on the newest omnibus hope is received, in order to carry out, whenever processing of step S4-S14 is transmitted to carrying service reservation information from the newest omnibus candidate at this time.

[0079] In namely, the case of processing of step S7 using two pieces of a predetermined group's carrying service reservation information of an omnibus candidate (precedence omnibus candidate) which was once created as omnibus of two affairs and was registered into the database 12, and the newest omnibus candidate's carrying service reservation information When it judges [that the same car 3 can be allocated and] to the newest omnibus candidate and the precedence omnibus candidate of two affairs, (drawing 7 ; step S7 A->YES) and a computer 11 By eliminating the schedule information corresponding to the precedence omnibus candidate of two affairs who once created and registered with the database 12 (step S7B), and performing processing of step S9 The newest carrying service reservation information is memorized in a database 12 as a predetermined group's carrying service reservation information. The optimal operation root for allocating a car 3 to this predetermined group's omnibus candidate of three affairs is planned (step S9A), and processing of step S10 - step S14 is performed.

[0080] Namely, the schedule information containing the arrival time to each pick up location and destination based on the optimal operation root set up with the number of omnibus before reaching the number of the maximum omnibus (this operation gestalt three affairs), and the optimal operation root in pick up time When the newest omnibus candidate who can allocate the car corresponding to the schedule information appears, it is updated by the optimal schedule information for all omnibus candidates' carrying service reservation information, and is notified to the mounted processing unit 6 of the corresponding car 3.

[0081] On the other hand, the controller 24 of the mounted processing unit 6 of a car 3 outputs the operation root containing the arrival time of the pick up location and destination of each omnibus candidate in the pick up time through the information output section 23 based on the schedule information received through the communications department 20 as navigation information.

[0082] Consequently, the driver of a car 3 follows the navigation information (arrival time of the operation root in pick up time, and the pick up location and destination of each omnibus candidate) outputted with one [at least] gestalt of speech information, and images and text. By making it run the self-car 3, in two or more pick up locations, two or more omnibus candidates can be taken up, respectively, and sequential carriage can be carried out to the destination which corresponds the omnibus candidate (PAX) of the above-mentioned plurality in an omnibus gestalt.

[0083] Furthermore, without passing all the stay points P on the operation root M1, since each omnibus candidate's pick up location and destination are grasped beforehand, the driver of the car 3 it is running, for example with the operation gestalt 1 has not received reservation, namely, can carry out the shortcut of the stay point P which is not in a pick up location and the destination relation, and can run the point.

[0084] And when the driver of a car 3 transports each PAX to the corresponding destination, and the tariff settlement-of-accounts command is notified to a certain PAX, it receives the tariff (carriage) corresponding to the number of omnibus from the PAX (drawing 8 ; step S20 ->YES) and directly (step S21).

[0085] When the driver of a car 3 transports each PAX to the destination, and the tariff settlement-of-accounts command is not notified to the PAX, on the other hand, (Step S20->NO), The display-input section 22 is minded for the advice of PAX alighting at the destination. For a controller 24 delivery (step S22) and a controller 24 The advice of PAX alighting at the sent corresponding destination is sent to the computer 11 of the reservation reception allocation-of-cars center 4 through communication network 2 grade (step S23).
[0086] at this time, according to the sent advice of PAX alighting, a computer 11 carries out reading appearance of the corresponding PAX's account number with reference to that carrying service reservation information (step S24), and charges directly automatically the omnibus tariff corresponding to the number of omnibus to the account of a corresponding financial institution based on the account number of a financial institution which carried out reading appearance (step S25).
[0087] Consequently, two or more PAX who wished omnibus can be transported to the destination with an omnibus gestalt with the same car, respectively, and carriage can be taken.
[0088] On the other hand, in independent entrainment (step S2, S5-> "*independent entrainment*"), it sets the result of decision of step S2, and as a result of decision of step S5. A computer 11 registers the carrying service reservation information (pick up time, a location, and destination) of the independent entrainment candidate who received into a database 12 (step S15). the currency information of each car 3 in the allocation-of-cars area A1 including a waiting circle W1, and the road traffic information in the allocation-of-cars area A1 (delay information --) It is based on an independent entrainment candidate's carrying service reservation information (pick up time, a location, and destination) registered into the databases 12, such as accident information. The car 3 with optimal dropping in at its pick up time and location is extracted, and it asks for the arrival time to the pick up location and destination based on the operation root which created the operation root based on the pick up time, location, and destination, referring to road traffic information etc., and created it (step S16).
[0089] subsequently, a computer 11 transmits the reservation reception information (image information) containing the existence selection information and the reservation reception message of the arrival time from a database 12 to the pick up location and destination which carried out reading appearance of the tariff corresponding to independent entrainment, and asked for it, the tariff which carried out reading appearance, and carrying service utilization to an independent entrainment candidate's communication equipment 5 through the communications department 10 and a communication network 2 (step S17).
[0090] Like an omnibus candidate's case, consequently, on the display of communication equipment 5 Reservation reception information as shown in drawing 6 is displayed. By click actuation of the service utilization PB3 from an independent entrainment candidate a computer 11 The arrival time to the pick up location and destination based on the operation root created at step S16 and the operation root in pick up time is memorized in a database 12 as schedule information on the corresponding car 3 (step S18), and advice processing of the schedule information on step S14 etc. is performed.
[0091] Consequently, the driver of the corresponding car 3 like an omnibus candidate's case The navigation information (arrival time of the operation root in pick up time, and the pick up location and destination of an independent entrainment candidate) outputted with one [at least] gestalt of speech information, and images and text is followed. By making it run the self-car 3, an independent entrainment candidate can be taken up in the pick up location, and the independent entrainment candidate (PAX) can be independently transported to the corresponding destination.
[0092] In addition, in the explanation mentioned above, although carrying service reservation reception processing and allocation-of-cars processing of the user in the allocation-of-cars area A1 by the computer 11 of the reservation reception allocation-of-cars center 4 were explained, also in other allocation-of-cars area A2 and A3, the same carrying service reservation reception processing as the allocation-of-cars area A1 and allocation-of-cars processing are performed. Namely, the carrying service reservation from the user in each area A1 - A3 can be received according to an individual for the allocation-of-cars area A1 - every A3, and the car 3 corresponding to reservation information can be allocated for every area A1 - A3.
[0093] As stated above, according to this operation gestalt, the allocation-of-cars area R is divided into two or more allocation-of-cars area A1 - A3. Two or more cars 3 are made to stand by for the divided allocation-of-cars area A1 - every A3. Reservation of the carrying service from a pick up location to the destination can be received for the allocation-of-cars area A1 - every A3 with the central reservation reception allocation-of-cars center 4, and a car 3 can be allocated according to an individual for every area A1 - A3 corresponding to reception beam reservation information.

[0094] Therefore, by inputting one's location wishing pick up, time of day, destination, etc., a user can reserve the carrying service of a car 3, he can allocate cars, can make a car able to operate at a user's location wishing pick up and time of day, can accumulate, and can raise a user's convenience substantially.
[0095] Moreover, according to this operation gestalt, since allocation-of-cars management of a car 3 is performed for the allocation-of-cars area A1 - every A3, it can respond to a demand of the user for every area promptly, and a user satisfaction level can be raised further.
[0096] Furthermore, the allocation-of-cars approach of the bus mold system of transporting to the destination while happening the allocation-of-cars approach of the taxi mold system which allocates a car 3 according to a carrying service reservation demand (pick up and carriage demand) of a user, and two or more users to ride with this operation gestalt, as mentioned above is combined. And also to the tariff structure, in order to stop at two or more pick up locations and destinations in omnibus carriage, see from the taxi of a bus mold system and it brings close to comparatively cheap carriage. Since it can run to a pick up location and the destination promptly in independent carriage and is bringing close to the carriage of a taxi mold system, An example can be taken from the field of the allocation-of-cars approach, and the field of the tariff structure, the system which employed the advantage of the above-mentioned taxi mold system and a bus mold system efficiently can be built, and efficient management of the carriage system 1 is attained.
[0097] With this operation gestalt, and by processing (refer to drawing 5 R> 5, drawing 7 , and drawing 8) of the computer 11 of communication equipment 5 and the reservation reception allocation-of-cars center 4 and the controller 24 of the mounted processing unit 6 of each car 3 Since reservation reception processing, car allocation-of-cars processing, and tariff **** processing can be performed automatically, without stationing permanently the operator for reservation reception processing, and the operator for allocation of cars at the reservation reception allocation-of-cars center 4, the management cost containing the labor cost of a carriage system can be reduced substantially.
[0098] With this operation gestalt, furthermore, the operation root of each car 3 allocated by each allocation-of-cars area A1 - A3 Since routing is carried out by the reservation reception allocation-of-cars center 4 and it is directed on each car 3, respectively, For example, since it can be made to run the self-car 3 certainly along the directed operation root even when an unfamiliar newcomer's driver operates a car 3 with a surrounding traffic situation, the dependability of the carriage system 1 can be raised further. Moreover, since the operation root is set up the optimal based on road traffic information, such as delay information on each allocation-of-cars area A1 - A3, accident information, and work information, it can prevent the loss of allocation-of-cars time amount, and can raise allocation-of-cars effectiveness further.
[0099] And with this operation gestalt, it does not transport one PAX at a time (every [a lot]) like the operation system by the taxi, without carrying out omnibus. When making a car 3 operate according to the schedule information once planned and created and transporting the PAX [when carrying service reservation enters newly from the new PAX (omnibus candidate) who can transport in an omnibus format by this car 3] the schedule information which re-created the above-mentioned schedule information based on the new PAX's carrying service reservation information, and was re-created — following — the above -- since the new PAX can be taken up and transported, the high carriage system of carriage effectiveness can be offered dramatically.
[0100] It sets to the carriage system of this operation gestalt especially. Since the PAX can reserve carrying service from communication equipment, such as a cellular phone and a personal digital assistant, at any time, and can happen to ride in the same same car and can transport the PAX of plurality (two or more sets), It becomes possible to abolish existence of the car group of other carriage systems which constitute a train at current, a station, etc. and carry out the PAX's entrainment waiting, or to reduce the number substantially, and can contribute to prevention of the traffic congestion resulting from existence of the above-mentioned car group, prevention of useless fuel consumption, and an emissions cut.
[0101] On the other hand, in the carriage system of this operation gestalt, since a user can choose the tariff structure corresponding to two or more operation approach (independent entrainment, omnibus) and two or more of its operation approaches himself, he can receive offer of the optimal carrying service according to his situation by choosing independent entrainment, when hurrying to the destination, and choosing omnibus, when not hurrying so much.
[0102] Furthermore, the user located in the allocation-of-cars area which is the limited field divided from the allocation-of-cars area R in the carriage system of this operation gestalt is received. Since a user can be beforehand notified of the pick up time of day in the pick up location specified by a user even if the latency

time chooses omnibus few, since the car 3 which exists in the same allocation-of-cars area is allocated, a user can grasp his latency time beforehand.
[0103] Therefore, the latency time in a bus stop like the system by the conventional bus is lost, and the carriage system 1 can be used in comfort according to its schedule.
[0104] In addition, although the carriage service user reserved carrying service with this operation gestalt using communication equipment, it is also possible for this invention not to be limited to this and to perform carrying service reservation by call toing a car to stop by the road side like a taxi in addition to the reservation using the above-mentioned communication equipment.
[0105] In this case, it is also possible for a user to operate the communication equipment of a pocket mold and to send carrying service reservation information to a reservation reception allocation-of-cars center, and it is also possible for a driver to operate the display-input section based on the carrying service reservation information uttered from the user, and to transmit the above-mentioned carrying service reservation information to a reservation reception allocation-of-cars center through processing of the controller for mount and the communications department.
[0106] In the carriage system of this operation gestalt, although it was made to carry out reservation reception processing, car allocation-of-cars processing, etc. automatically, without stationing an operator permanently at a reservation reception allocation-of-cars center, of course, it is possible also in carrying out reservation reception and allocation-of-cars processing by the voice dialogue which the above-mentioned operator was stationed permanently and minded in the communication equipment between an operator and a user and between an operator and a driver (for example, a telephone etc.).
[0107] Moreover, the speech recognition processing program and the automatic voice guidance transmitting program can be made to be able to build in the computer 11 of a reservation reception allocation-of-cars center, and a reservation receptionist can also be performed when a user recognizes automatically the speech information uttered according to the automatic voice guidance which flows from the communication equipment 5, such as telephone 5b.
[0108] Furthermore, in the carriage system concerning this operation gestalt, the reservation reception allocation-of-cars center 4 side can perform reservation reception processing as the modification based on the speech information uttered from the user, without [without it stations an operator permanently at a reservation reception allocation-of-cars center, and] using a speech recognition program.
[0109] That is, the call device (in this modification, it considers as a cellular phone) 30 which that driver can voice talk over the telephone is carried in each car 3 in carriage system 1A concerning this modification, and the computer 11 has managed the telephone number of each of this cellular phone 30 every car 3.
[0110] In order that the user H who has a house in a certain allocation-of-cars area (for example, allocation-of-cars area A1) may reserve carrying service at this time, communication equipment 5 (telephone 5b) is used for the reservation reception allocation-of-cars center 4 from a house, and it telephones.
[0111] If the call signal based on a telephone is transmitted to the computer 11 of the reservation reception allocation-of-cars center 4 through communication network 2 grade at this time, according to that call signal, a computer 11 will detect the location of the call signal dispatch origin in the allocation-of-cars area A1 (step S30), and will take up the car 3 which is running the location nearest to that sending agency detection location (step S31).
[0112] Subsequently, a computer 11 transmits the above-mentioned call signal to the cellular phone 30 of the car 3 which took up (step S32).
[0113] At this time, when the driver of the pickup car 3 performs call actuation according to the call signal emitted from a cellular phone 30, a driver converses with a user with voice and recognizes the carrying service reservation information uttered from the user (step S33).
[0114] Then, a driver operates the display-input section 22, communicates with the reservation reception allocation-of-cars center 4 by processing of the controller 24 grade for mount, and displays Screen I for carrying service reservation on the monitor of the display-input section 22 by processing of this controller 24 (step S34).
[0115] And a driver operates the display-input section 22 and transmits the carrying service reservation information that a user's carrying service reservation information was inputted and inputted, in the reservation reception allocation-of-cars center 4 through a communication network 2 on Screen I for carrying service reservation (drawing 5 ; step S1 reference).
[0116] Hereafter, processing of step S1 of above-shown drawing 5 - step S12 is performed, and reception

processing of the carrying service reservation information which the user uttered is carried out in the reservation reception allocation-of-cars center 4.
[0117] Moreover, in processing of step S10 of above-shown drawing 5 - step S11, the computer 11 of the reservation reception allocation-of-cars center 4 sends reservation reception information to each omnibus candidate as speech information uttered from a driver through the cellular phone 30 of the communications department 10, a communication network 2, and a car 3.
[0118] And a driver recognizes by the voice dialogue through the cellular phone 30 of the corresponding car 3, a computer 11 changes a recognition result into the signal in which read is possible by processing of a controller 24, and the answerback (service utilization information / service-utilization-less information) from each omnibus candidate is also sent to the computer 11 of the reservation reception allocation-of-cars center 4 through the communications department 20 and a communication network 2.
[0119] That is, holding down low the management cost containing the labor cost of the reservation reception allocation-of-cars center 4, since carrying service reservation information with the voice from a user is receivable according to this modification, fully automating the reservation reception allocation-of-cars center 4 without stationing an operator permanently, reservation of the carrying service can be received by the voice dialogue by telephone 5b which gets used most and is familiar, and a subscriber can raise a subscriber's convenience.
[0120] In addition, this modification is not applied only to the carrying service reservation by the car.
[0121] For example, also in the reception processing system which receives the service request, it is applicable by sending service requests, such as boarding reservation of a passenger transport, reservation of a concert ticket, and a goods purchase application, to a reception center with voice through a telephone etc.
[0122] Namely, by covering two or more areas beforehand, securing a fixed number of call personnel equivalent to the above-mentioned driver, and arranging the computer terminal When a reception center is fully automated and the call signal for service requests is transmitted to a reception center, a reception center It can tell the call personnel who took up a user's service request by pinpointing the location of the dispatch origin, taking up the call personnel nearest to the location according to the transmitted call signal, and transmitting the above-mentioned call signal to the call personnel who took up.
[0123] Hereafter, it is transmitted to the reception center, and the information (data) that the reception center showing the service request transmitted by computer terminal actuation of the call personnel who told the service request can be recognized is automatically recognized and registered by the reception center.
[0124] Thus, also in the reception processing system concerning this modification, since speech information can be electronized and reception processing can be carried out, using people with work of above others, or a housewife in PERT/TIME, without stationing permanently the operator for reservation reception under exclusive contract at a reception center, the management cost containing the labor cost of a speech information reception processing system can be reduced.
[0125] In addition, although the carrying service reservation information on audio was inputted in this modification as a signal which can recognize the reservation reception allocation-of-cars center 4 (computer 11) by inputting a user's carrying service reservation information on Screen I for carrying service reservation This invention is not limited to this, and assigns the alphabetic character etc. beforehand to each push-button phone carbon button of a cellular phone 30, and its combination, and you may make it input the above-mentioned carrying service reservation information into the reservation reception allocation-of-cars center 4 by push button actuation of a driver.
[0126] Moreover, in this operation gestalt and its modification, although the allocation-of-cars area was divided into three and each was made into allocation-of-cars area, it is also possible to consider as independent allocation-of-cars area, without not limiting this invention to the above-mentioned number of partitions, and dividing.
[0127] Furthermore, in this operation gestalt and its modification, although the number of the maximum omnibus was made into three affairs (3 sets), it is also possible for this invention not to be limited to the number of the maximum omnibus, and to accept further much omnibus depending on the magnitude of a car.
[0128]
[Effect of the Invention] As stated above, according to the storage in which read is possible, the carriage approach concerning this invention, a system, and a computer can receive reservation of the carrying service from a car utilization location to the destination, and can allocate a car corresponding to reception beam reservation information.

[0129] Therefore, by inputting one's location wishing pick up, time of day, destination, etc., a user can reserve the carrying service of a car, he can allocate cars, can make a car able to operate at a user's car utilization location and time of day, can accumulate, and can raise a user's convenience substantially.
[0130] Furthermore, in this invention, since the bus architecture of transporting to the destination is combinable, happening the taxi method which allocates a car according to a carrying service reservation demand of a user, and two or more users to ride as mentioned above, the system which employed the advantage of the above-mentioned taxi method and a bus architecture efficiently can be built, and the efficiency of management of a carriage system can be increased dramatically.
[0131] Moreover, holding down low the management cost containing the labor cost of a reception center, since carrying service reservation information with the voice from a user is receivable by computer for reception processing with work of two or more call members according to the reception processing system concerning this invention, fully automating a reception center without stationing an operator permanently, a service request can be received by call in the voice call machine which gets used most and is familiar, and a service user can raise a service user's convenience.

[Translation done.]

* NOTICES *

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2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

TECHNICAL FIELD

[Field of the Invention] This invention relates to the storage in which the read of the carriage approach which made it possible to receive entrainment reservation of two or more users who receive the same car, and to allocate a car, a system, and a computer is possible in the carriage approach and system which transport the PAX and take a tariff by making cars, such as a bus, operate.
[0002] Furthermore, this invention relates the service request of voice, such as reservation sent from speech information communication equipment, such as a telephone, and a purchase application of goods, to the reception processing system in which reception processing is possible in the uninhabited reception center.

[Translation done.]

PRIOR ART

[Description of the Prior Art] The bus business which is the big column of current and a PAX carriage system on land is an approval system, and the carrier beam bus entrepreneur is developing the bus business for approval from government.

[0004] In the conventional bus business, by making it run, making it stop at the time of day beforehand set to the stop fixed on the operation root along the operation root which was able to define the bus beforehand, it transports to the stop of a request of the PAX who stands by at a stop, and the tariff for the carriage is taken.

[0005] Moreover, in the taxi business which is a column on a par with the bus business in a PAX carriage system on land, one PAX (lot) is transported for every PAX to the location of each request, and the tariff for the carriage is taken.

[0006] On the other hand, there is a speech information reception processing system which receives the service request by sending service requests, such as boarding reservation of a passenger transport, reservation of a concert ticket, and a goods purchase application, to a reception center with voice through a telephone etc. conventionally.

[0007] In this speech information reception system, reception processing of that service request is carried out by always allotting many operators to the reception center and conversing with a service user.

[Translation done.]

* NOTICES *

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EFFECT OF THE INVENTION

[Effect of the Invention] As stated above, according to the storage in which read is possible, the carriage approach concerning this invention, a system, and a computer can receive reservation of the carrying service from a car utilization location to the destination, and can allocate a car corresponding to reception beam reservation information.
[0129] Therefore, by inputting one's location wishing pick up, time of day, destination, etc., a user can reserve the carrying service of a car, he can allocate cars, can make a car able to operate at a user's car utilization location and time of day, can accumulate, and can raise a user's convenience substantially.
[0130] Furthermore, in this invention, since the bus architecture of transporting to the destination is combinable, happening the taxi method which allocates a car according to a carrying service reservation demand of a user, and two or more users to ride as mentioned above, the system which employed the advantage of the above-mentioned taxi method and a bus architecture efficiently can be built, and the efficiency of management of a carriage system can be increased dramatically.
[0131] Moreover, holding down low the management cost containing the labor cost of a reception center, since carrying service reservation information with the voice from a user is receivable by computer for reception processing with work of two or more call members according to the reception processing system concerning this invention, fully automating a reception center without stationing an operator permanently, a service request can be received by call in the voice call machine which gets used most and is familiar, and a service user can raise a service user's convenience.

[Translation done.]

TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] However, in the PAX carriage system by the conventional bus, since a bus ran along the always decided operation root based on Kursbuch decided beforehand, every time receiving the entrainment reservation from the PAX was completely performed, it was not broken, but the fixed limitation had been generated in the improvement in convenience by the side of the PAX.
[0009] Moreover, since it was the same, it is impossible to also make buses allocate cars and run at the PAX's location of choice and time of day of choice, and it did not result in improvement in the convenience by the side of the PAX too.
[0010] Furthermore, in the PAX carriage system by the conventional bus, as for the bus, the operation root corresponding to the stop which the PAX does not stand by, for example and alighting hope does not have, either must also run, and did not always come to raise operational efficiency from the same reason.
[0011] And according to the PAX carriage system by the conventional taxi, even if entrainment hope was obtained from other PAX while transporting a certain PAX, since the PAX was not able to be made to ride together, it did not come to raise carriage effectiveness.
[0012] On the other hand, in the conventional speech information reception processing system, many operators had to be stationed permanently at the reception center and the reception processing-system management cost containing a labor cost was increasing.
[0013] It was made in order that this invention may solve the trouble of a majority of PAX carriage systems by the bus mentioned above, and above-mentioned PAX carriage systems by the taxi, and the allocation of cars of the car for carriage to the omnibus of entrainment reservation of the car for carriage and two or more PAX, and the PAX's car utilization location and utilization time of day enables, respectively, and it sets it as the 1st object to realize improvement in the convenience, the operational efficiency, and the carriage effectiveness to the PAX, respectively.
[0014] Moreover, this invention was made in view of the situation mentioned above, and reception processing of much speech information of it is enabled, managing reception center parking operation by uninhabited, and let it be the 2nd object to reduce substantially the management cost of the speech information reception processing system containing a labor cost.

[Translation done.]

MEANS

[Means for Solving the Problem] In our country, it ages 2001, deregulation of a carriage business law is enforced, and the bus business run by current and the approval system changes to a notification system. Therefore, in addition to the current existing bus entrepreneur, it is expected that the entrepreneur of various types of industry, such as a taxi entrepreneur and a PD entrepreneur, enters into a bus business using a notification system.

[0016] Therefore, in the PAX carriage business the competition intensification under a notification system is expected to be, although it is necessary to solve the trouble of the PAX carriage system by the bus mentioned above, or the PAX carriage system by the taxi, and to take the part to improvement in the PAX's convenience, the improvement in operational efficiency, and improvement in carriage effectiveness, the actual condition is not invented at all about the concrete policy.

[0017] Then, according to invention according to claim 1 produced in order to attain the object mentioned above based on such a background In the carriage system which provides a user with carrying service by making two or more cars in predetermined area operate The car utilization time inputted from the user side of the plurality in said predetermined area, The 1st decision means which judges whether the same car in said two or more cars can be allocated to said two or more users based on two or more service reservation information which includes a car utilization location, the destination, and independent / information wishing omnibus, respectively, When the same car can be allocated, as a result of this decision The car utilization time of each of two or more of said service reservation information, A retrieval means to ask for the arrival time of said same car to two or more car utilization locations and destinations based on the optimal operation root searched and searched for the optimal operation root of said same car based on a car utilization location and the destination, respectively, An offer means to offer the reservation reception information that reception of said service reservation information is expressed, to two or more corresponding users, respectively, It has a storage means to memorize the arrival time to said optimal operation root and said two or more car utilization locations, and the arrival time to said two or more destinations as schedule information, and an advice means to notify the memorized schedule information to said same car side.

[0018] In claim 2, said predetermined area is divided into plurality and said 1st decision means performs said decision processing based on two or more service reservation information that it is inputted from the user side of the plurality in each of that area, for every area.

[0019] In claim 3 said two or more service reservation information Each reservation reception information which includes the information which chooses the account transfer method containing the account number as an approach to pay said service utilization tariff, and is offered to said two or more users While the service utilization tariff set up according to the number of the arrival time to said two or more car utilization locations, the arrival time to said two or more destinations, and said two or more users is included, said storage means It responds to the information showing the service utilization which answered offer of said reservation reception information on said offer means, and was transmitted from two or more said user side. While memorizing the arrival time to said optimal operation root and said two or more car utilization locations, and the arrival time to said two or more destinations as schedule information When said two or more users are transported based on the schedule information notified by said advice means, respectively, it has the means which charges the service utilization tariff of the user concerned directly to the account corresponding to said account number of the financial institution of the user who has chosen said account transfer method.

[0020] In claim 4, said 1st decision means is judged [that said same car can be allocated and], when it includes the car utilization day when said two or more service reservation information is the same, and the information wishing omnibus, respectively.

[0021] When new service reservation information is inputted from other user side in claim 5 after said schedule information was memorized by said storage means The 2nd decision means which judges whether the same car corresponding to said schedule information can be allocated to a user besides the above based on the service reservation information, The car utilization time of each of all service reservation information judged [that the same car can be allocated and] as a result of this decision when said same car was able to be allocated, A re-retrieval means to ask for the arrival time of said same car to two or more car utilization locations and destinations based on the optimal operation root which the optimal operation root of said same car was searched again, and was re-searched for it based on a car utilization location and the destination, respectively, A re-offer means to re-provide, respectively to all the users that judged [that the same car can allocate cars and] the reservation reception information that reception of all the service reservation information judged [that said same car can be allocated and] was expressed, A restoration means to eliminate the schedule information memorized for said storage means, and to restore the arrival time to said optimal operation root and said two or more car utilization locations, and the arrival time to said two or more destinations as schedule information, It has an advice means of re-to re-notify the schedule information which it restored to said same car side.

[0022] Moreover, according to invention according to claim 6 produced in order to attain the object mentioned above based on the above-mentioned background In the carriage system which provides a user with carrying service by making two or more cars in predetermined area operate The car utilization time, the car utilization location which are inputted from the user side in said predetermined area, Independent / an omnibus decision means by which said user judges whether they are independent entrainment hope or omnibus entrainment hope based on the service reservation information which includes the destination, and independent / information wishing omnibus, respectively, When it is independent entrainment hope as a result of this decision, the car utilization time of the service reservation information concerned, A retrieval means to ask for the arrival time of said car to a car utilization location and the destination based on the optimal operation root searched and searched for the optimal operation root based on a car utilization location and the destination, An offer means to offer the reservation reception information that reception of said service reservation information is expressed, to said user, It has a storage means to memorize the arrival time to said optimal operation root and said car utilization location, and the arrival time to said destination as schedule information, and an advice means to notify the memorized schedule information to said car side.

[0023] When new service reservation information is not inputted from other user side in claim 7 by input decision means whether service reservation information new from other user side when it is omnibus entrainment hope as a result of decision of said independent / omnibus decision means is inputted, and judge, and this input decision means, said retrieval means searches said optimal operation root by treating considering the user of said omnibus entrainment hope as an independent entrainment hope.

[0024] A decision means wishing omnibus entrainment to judge whether the new service reservation information concerned includes omnibus entrainment hope in claim 8 when new service reservation information is inputted from other user side as a result of decision of said input decision means, When said surveillance reservation information includes omnibus entrainment hope as a result of this decision The car utilization time, the car utilization location which are inputted from other said user and user side, An allocation-of-cars decision means to judge whether the same car in said two or more cars can be allocated to said user and other users based on two or more service reservation information which includes the destination, and independent / information wishing omnibus, respectively, As a result of decision of this allocation-of-cars decision means, when the same car can be allocated Based on said car utilization time of two or more service reservation information of each, a car utilization location, and the destination, the optimal operation root of said same car is searched. A retrieval means to ask for the arrival time of said same car to two or more car utilization locations and destinations based on the searched optimal operation root, respectively, An offer means to offer the reservation reception information that reception of two or more of said service reservation information is expressed, to said user and other users, respectively, It has a storage means to memorize the arrival time to said optimal operation root and said two or more car utilization locations, and the arrival time to said two or more destinations as schedule information, and an advice means to notify the memorized schedule information to said same car side.

[0025] In claim 9, said each car has the communication link unit in which said 1st decision means and communication link are possible by the call device by which the driver can talk over the telephone with voice, and actuation of a driver. Said user A call signal is transmitted to said 1st decision means by the voice call

device, and said service reservation information is inputted as speech information after said call signal reception. Said 1st decision means A location detection means to detect the location in said predetermined area of the user of the call signal dispatch origin concerned according to said transmitted call signal, A pickup means to take up the car which runs the location nearest to a detecting user location, It has a transfer means to transmit said call signal to the call device of the car which took up. The driver of the taken-up car concerned By connecting said call device and said user's voice call device, and talking over the telephone according to the transmitted call signal It is constituted so that the content of the service reservation information that have recognized the content of the speech information showing said user's service reservation information, and said communication link unit has been operated and recognized may be transmitted to the 1st decision means concerned as a signal which can recognize said 1st decision means.
[0026] Furthermore, according to invention according to claim 10 produced in order to attain the object mentioned above based on the above-mentioned background In the reception processing system which receives the service request of the call signal transmitted through the voice call device from the user, and voice by computer for reception processing installed in the reception center The call device by which two or more call members located in two or more locations can talk over the telephone with voice, It has said computer for reception processing, and the communication link unit which can be communicated by actuation of said call member. Said computer for reception processing A location detection means to detect the location of the user of the call signal dispatch origin concerned according to said call signal, A pickup means to take up the call member nearest to a detecting-among said two or more call members user location, It has a transfer means to transmit said call signal to the call device of the call member which took up. The taken-up call member concerned By connecting said call device and said user's voice call device, and talking over the telephone according to the transmitted call signal It is constituted so that the content of the service request which has recognized the content of the service request said user's voice, and has operated and recognized said communication link unit may be transmitted to the computer for reception processing concerned as a signal which can recognize said computer for reception processing.
[0027] And according to invention according to claim 11 produced in order to attain the object mentioned above based on the above-mentioned background In the carriage approach of providing a user with carrying service by making two or more cars in predetermined area operating The car utilization time inputted from the user side of the plurality in said predetermined area, The step which judges whether the same car in said two or more cars can be allocated to said two or more users based on two or more service reservation information which includes a car utilization location, the destination, and independent / information wishing omnibus, respectively, When the same car can be allocated, as a result of this decision step The car utilization time of each of two or more of said service reservation information, The step which asks for the arrival time of said same car to two or more car utilization locations and destinations based on the optimal operation root searched and searched for the optimal operation root of said same car based on a car utilization location and the destination, respectively, The step which offers the reservation reception information that reception of two or more of said service reservation information is expressed, to two or more corresponding users, respectively, It has the step which memorizes the arrival time to said optimal operation root and said two or more car utilization locations, and the arrival time to said two or more destinations as schedule information, and the step which notifies the memorized schedule information to said same car side.
[0028] According to invention according to claim 12 produced on the other hand in order to attain the object mentioned above based on the above-mentioned background In the storage in which the read of the computer which performs processing which provides a user with carrying service by making two or more cars in predetermined area operate is possible The car utilization time inputted from the user side of the plurality in said predetermined area, A means to make a computer judge whether the same car in said two or more cars can be allocated to said two or more users based on two or more service reservation information which includes a car utilization location, the destination, and independent / information wishing omnibus, respectively, When the same car can be allocated, as a result of this decision The car utilization time of each of two or more of said service reservation information, Said computer is made to search the optimal operation root of said same car based on a car utilization location and the destination. A means to make said computer asked for the arrival time of said same car to two or more car utilization locations and destinations based on the optimal operation root which was made to search and was obtained, respectively, An offer means to make the reservation reception information that reception of two or more of said service reservation information is expressed offer to two or more users who correspond by said computer, respectively, It has the means stored

in said computer by making the arrival time to said optimal operation root and said two or more car utilization locations, and the arrival time to said two or more destinations into schedule information, and an advice means to make said computer notify the memorized schedule information to said same car side.

[0029]

[Embodiment of the Invention] The gestalt of operation of the carriage approach by the car of this invention and a system, a reservation reception art and a system, a reception art, and a system is explained with reference to an accompanying drawing.

[0030] Drawing 1 is the block diagram showing the outline configuration of the carriage system containing the reservation reception processing system concerning the gestalt of operation of this invention.

[0031] For example, the inside of the area of specification, such as a certain cities, towns and villages whole region or an area over two or more cities, towns and villages, is made into an allocation-of-cars area. according to drawing 1 — the carriage system 1 — It responds to operation service reservation from two or more operation service users (PAX) who can set in this allocation-of-cars area. It is the system which transports a carriage service user (PAX) in an allocation-of-cars area by making it run the car for carriage (for example, for a micro bus, a wagon vehicle, a subcompact, etc. to only be called a car below;), permitting the *omnibus of a maximum* of three affairs (3 sets) as opposed to the same car.

[0032] Namely, an information communication link is possible for the carriage system 1 through independent or the communication line (communication networks, such as the Internet) 2 constituted by combining more than one in the telephone line, ISDN, a communication link dedicated line, etc. The reservation reception allocation-of-cars center 4 for performing automatically reservation reception processing of two or more cars 3, allocation-of-cars processing, and reservation reception / allocation-of-cars management processing. By operating telephone 5b containing terminal 5a which contains Personal Digital Assistants, such as a pocket mold computer, from the inside of an allocation-of-cars area, or a cellular phone etc., and carrying out an information communication link with the reservation reception allocation-of-cars center 4 through a communication network 2 It was carried in the communication equipment 5 for reserving carrying service by the car 3, and two or more cars of each, and has the mounted processing unit 6 in which an information communication link is possible through the communication network 2.

[0033] Moreover, the carriage system 1 is equipped with storage and the control center 7 which manages and sends the road traffic information in the allocation-of-cars area R to the reservation reception allocation-of-cars center 4 based on the detection information sent one by one from the sensor group which was installed on the route of the allocation-of-cars area R in the road traffic information in the allocation-of-cars area R and which is not illustrated at least.

[0034] Drawing 2 is drawing showing the allocation-of-cars area R in the carriage system 1 of this operation gestalt, and reservation reception allocation-of-cars center 4 *grade*.

[0035] As shown in drawing 2 , the allocation-of-cars area R is divided into two or more allocation-of-cars area (in drawing 2 , it considers as 3 area), and the reservation reception allocation-of-cars center 4 is installed in the center of abbreviation of the allocation-of-cars area R.

[0036] Moreover, the car 3 which the waiting circle W1 for making two or more cars 3 stand by - W3 are installed in the divided each allocation-of-cars area A1 - A3, and stands by to each waiting circle W1 - W3 mainly operates the inside of the corresponding allocation-of-cars area A1 - A3, and offers fine carrying service for the allocation-of-cars area A1 - every A3.

[0037] The car 3 which stands by by each waiting circle W1 in each allocation-of-cars area A1 - A3 - W3 runs in the area which chooses any one of the following 3 operation gestalten defined beforehand, and corresponds.

[0038] That is, as shown in drawing 3 (only the allocation-of-cars area A1 is shown), each car 3 runs basic operation root [which was beforehand set up in area] M1 - M3 top fundamentally, and stops at the 1st operation gestalt on the stay point P for PAX getting on and off beforehand set as the predetermined location on each operation root M1 - M3.

[0039] The basic operation roots M1-M3 in this 1st operation gestalt are bases to the last, and are changed according to the PAX's reservation status. That is, it is possible to bypass a certain stay point P (with no PAX getting on and off), and to face to those with entrainment reservation or the stay point with the PAX which gets off, or to carry out short distance part detour transit (to refer to sign D in drawing) from the basic operation roots M1-M3, and to also make the PAX get on and off in locations other than basic operation root M1 - M3 (stay point P).

[0040] Each car 3 runs in area freely (free), takes up the PAX in the PAX's assignment entrainment location, stops at the PAX's assignment alighting location, and takes down the PAX to the 2nd operation gestalt.
[0041] Moreover, the 3rd operation gestalt uses together the 1st operation gestalt and the 2nd operation gestalt, and assigns the car it runs with the 1st operation gestalt among two or more cars 3, and the car 3 it runs with the 2nd operation gestalt by the ratio according to the PAX's reservation status.
[0042] As for whether it is desirable to adopt which operation gestalt, it is desirable to change also with the magnitude of the allocation-of-cars area R and each magnitude of the allocation-of-cars area W1 - W3, and to adopt the operation gestalt 2 or 3, if each allocation-of-cars area W1 - W3 are comparatively narrow, and it is desirable to, adopt the operation gestalt 1 or 3 on the other hand, if each allocation-of-cars area W1 - W3 are extensive.
[0043] Even when which operation gestalt is adopted, in the carriage system 1 of this operation form gestalt, the allocation-of-cars area R is divided into plurality (this operation gestalt three), and each allocation-of-cars area A1 - A3 are constituted, and it is devising so that a waiting circle may be installed in each allocation-of-cars area A1 - A3 and every area may be allocated promptly and smoothly.
[0044] Moreover, when the 2nd operation gestalt is adopted, allocation-of-cars operation of the car can just be carried out to the location according to a demand (demand) of the user in each allocation-of-cars area A1 - A3.
[0045] Since two or more basic operation roots are prepared for every area and detour transit from the basic operation root is enabled even when the 1st operation gestalt is adopted, furthermore, the user in each area It is not necessary to move from bus utilization starting positions, such as a house like the conventional bus, to the greatly distant stop, and since allocation-of-cars operation of the car 3 can be carried out to near the location wishing carrying service utilization initiation which the abbreviation user himself wishes and demands, the demand (demand) of a user can be met.
[0046] On the other hand, the user using the carrying service of the carriage system 1 By operating the terminal 5a and communicating with the reservation reception allocation-of-cars center 4, when terminal 5a is used as communication equipment 5 (it communicating through the homepage of the carriage system 1 etc.) The screen I for carrying service reservation including the carrying service reservation information input area A1-A8 is shown to the monitor (display) of terminal 5a by processing of the reservation reception allocation-of-cars center 4 (refer to drawing 4).
[0047] According to drawing 4 , in Screen I for carrying service reservation The input area AR1-AR3 for a user's individual humanity news [name, address, and the telephone number (TEL)] input. As a user's carrying service assignment information, pick up time (car utilization time) and a location (car utilization location; operation gestalt [of ** a 1st] -> the desired stay point P and entrainment time amount; operation gestalt [of ** a 2nd] -> the location wishing entrainment and time amount of choice), the destination, a utilization staff, the operation approach (independent entrainment hope or omnibus entrainment hope), and the tariff settlement-of-accounts approach (account draw down —) The carrying service assignment information input area AR4-AR8 for inputting a cash basis is formed. Or a user Terminal 5a (the pointing device and keyboard of a terminal) is operated, and it inputs into the input area AR1-AR8 which corresponds carrying service reservation information (individual humanity news and carrying service assignment information), respectively. In addition, it is also possible to form for [which carried out member registration mentioned later] users as input area of the pull down menu method showing each input area AR1-AR8 on Screen I for carrying service reservation in drawing 4 , and it enables a user to input individual humanity news and carrying service information more simply.
[0048] And by a user's checking the carrying service reservation information that it was inputted into each area AR1-AR8, and clicking transmission PB1, the above-mentioned carrying service reservation information is decided by the content of an input, and the fixed carrying service reservation information is transmitted to the reservation reception allocation-of-cars center 4 through a communication network 2 by processing of terminal 5a.
[0049] In addition, when canceling the content of reservation inputted once, a user clicks cancellation PB2 and should just input again.
[0050] That is, in receiving carrying service, in this operation gestalt, a user can wish to receive carrying service in an omnibus format by specifying and inputting omnibus entrainment hope as the operation approach oneself.
[0051] In addition, in choosing account draw down from a financial institution as the tariff settlement-of-

accounts approach, it also transmits the account number of the financial institution collectively.
[0052] Moreover, although you may transmit whenever individual humanity news, such as a name and an address, uses carrying service, it is also possible to receive the authentication information which a user registers as a carrying service utilization member of the carriage system 1 at the 1st utilization time (at the time of reservation termination), and contains Member ID, a password, etc. from the reservation reception allocation-of-cars center 4. By carrying out member registration, in the carrying service utilization time of the 2nd henceforth, the user is possible also for transmitting only authentication information and carrying service assignment information, and can save the time and effort which inputs individual humanity news.
[0053] On the other hand, telephone 5b, such as a cellular phone which is communication equipment It has the data communication facility and the data display function through a communication network 2 (Internet). The homepage address of the reservation reception allocation-of-cars center 4 is beforehand registered into telephone 5b. By searching that address, displaying Screen I for carrying service reservation of the reservation reception allocation-of-cars center 4 on the display of telephone 5b, and inputting carrying service reservation information on this screen I for carrying service reservation The same carrying service reservation information input process as terminal 5a can be performed.
[0054] And as the reservation reception allocation-of-cars center 4 is managed by the staff (reservation reception operator absence) of uninhabited or necessary minimum and it is shown in drawing 1 The function which carries out reception processing of the carrying service reservation information (individual humanity news, service assignment information) transmitted by the user automatically, and is memorized and managed in a database for the allocation-of-cars area A1 - every A3, It has the function to manage the function which allocates automatically the car 3 in each allocation-of-cars area A1 - A3 based on the carrying service reservation information memorized by the road traffic information and the database in the allocation-of-cars area R sent one by one from the control center 7, and the allocation-of-cars situation of each car 3, respectively.
[0055] With namely, the communications department 10 which the reservation reception allocation-of-cars center 4 gives interface processing to perform the information communication link between the self-center 4 and a communication network 2 convenient The memory built-in computer 11 for the above-mentioned reservation information management processing, allocation-of-cars processing, and allocation-of-cars situation management processing activation, It has the database 12 for memorizing the tariff information beforehand set up according to a member registered user's individual humanity news, reservation information by which reception processing was carried out, allocation-of-cars situation, and operation approach, respectively, and each [these] components 10-12 interconnect possible [a communication link] by bus 13.
[0056] For example, it is set up with minimum charge (for example, 300 yen) by omnibus of the maximum number of cases (this operation gestalt three affairs), it is set up like minimum charge x3 (for example, 900 yen) by two-affair omnibus by minimum charge x 1.5 (for example, 450 yen) or 1-affair omnibus (independent utilization), corresponding to the number of omnibus, and tariff information is memorized by the database 12. In addition, as for the tariff of independent utilization, it is desirable to set it as a price [a little] cheaper than the starting fare at the time of using a taxi.
[0057] With the communications department 20 which, on the other hand, performs interface processing to perform the information communication link between the self-mount processing unit 6 and a communication network 2 convenient as the mounted processing unit 6 of each car 3 is shown in drawing 1 With for example, the positional information receive section 21 which receives positional information, such as a GPS signal transmitted from three GPS Satellites, and asks for the transit location of the self-car 3 The display-input section 22 which can input data and a command on the screen which has a monitor and was displayed on the monitor, It has the information output section 23 in which an output is possible, and the controller 24 for mount for carrying out generalization control of the mounted processing unit 6 whole through the monitor of the display-input section 22 by making at least one of speech information, and images and text into navigation information.
[0058] The computer 11 of the reservation reception allocation-of-cars center 4 operates according to the program built-in computers, such as ROM and RAM, were remembered to be by the storage in which read is possible. Namely, the computer 11 Based on the positional information of each car 3 in each allocation-of-cars area A1 as for which is received by the positional information receive section 21 of the mounted processing unit 6, and sequential transmission is carried out by transmitting processing of a controller 24 through a communication network 2 - A3, the current position of each car 3 is memorized and managed in a

database 12. If new carrying service reservation information is transmitted via a communication network 2 by communication equipment 5 actuation of a user, the carrying service reservation information will be received and the reservation information will be memorized in a database 12 for every allocation-of-cars area.
[0059] And a computer 11 responds to new carrying service reservation information reception / storage processing timing for the allocation-of-cars area A1 - every A3. *the road traffic information* in corresponding allocation-of-cars area, the car currency information memorized by the database 12, and carrying service reservation information (pick up time and location information —) Based on the destination, the operation approach, etc., the stopover and **** time of day on the operation root for allocating at least one set of two or more cars 3 in this allocation-of-cars area the optimal to the carriage service user in the allocation-of-cars area (subscriber) and the operation root are searched, respectively. The schedule information containing the searched operation root, the stopover, and **** time of day is updated for the allocation-of-cars area A1 - every A3 to a database 12.
[0060] Next, concrete actuation and processing of the carriage system concerning this operation gestalt are explained to a detail using drawing 5 - drawing 8 .
[0061] For example, it rides on predetermined time at a car 3 from the stay point P (in the case of the operation gestalten 1/3) nearest to the house (in the case of the operation gestalten 2/3) or house of the allocation-of-cars area A1. The user who wants to move on joint account to the destination in the allocation-of-cars area A1 For example, operate the communication equipment 5 installed in the house, such as terminal 5a, and Screen I for carrying service reservation is minded. Individual humanity news (in the case of the first reservation) or authentication information (in the case of the registered member), and carrying service assignment information [pick up time and a location (house), The destination, a utilization staff, operation information (omnibus hope), and the tariff settlement-of-accounts approach (For example, a user's account number is also included by account draw down) The carrying service reservation information containing] is inputted, and the carrying service reservation information that it inputted is transmitted to the reservation reception allocation-of-cars center 4 through a communication network 2 (drawing 5 ; step S1).
[0062] The computer 11 of the reservation reception allocation-of-cars center 4 receives the carrying service reservation information transmitted from communication equipment 5 through the communications department 10, and judges omnibus hope or independent entrainment hope based on the received carrying service reservation information (step S2).
[0063] Now, since it is omnibus hope, decision of step S2 serves as "omnibus", and a computer 11 registers the sent carrying service reservation information as 1st group's omnibus candidate's carrying service reservation information (step S3).
[0064] Subsequently, time amount standby is carried out and a computer 11 judges [which set up beforehand after registration processing] whether carrying service reservation information was transmitted as the operation approach from other users in the same allocation-of-cars area A1 (step S4).
[0065] When operation service reservation information is not transmitted from other users into a standby time as a result of this decision, (step S4->NO) and a computer 11 update the carrying service reservation information of the omnibus candidate of the 1st group of the above to the carrying service reservation information on independent entrainment hope, consider that it is independent entrainment hope, and shift to processing of step S16.
[0066] When carrying service reservation information has been transmitted from other users as a result of decision of step S4 (step S4-> YES), a computer 11 receives the transmitted carrying service reservation information, and judges omnibus hope or independent entrainment hope based on the received carrying service reservation information (step S5).
[0067] When it is the decision result of this step S5, and omnibus hope (step S5-> "omnibus"), a computer 11 1st group's omnibus candidate's carrying service reservation information (*pick up time, a location, and* destination) registered into carrying service reservation information (pick up time, location, and destination) and database 12 of other users (omnibus candidate) who received is collated (step S6). Whether the same car 3 can be allocated and all omnibus candidates' reservation information can be realized It judges based on factors — whether it is a date with the same pick up day, or is a standby time permissible to the pick up time amount of hope in whether it is over the number of the maximum omnibus, whether the destination and the pick up ground are the same directions, and whether the destination and the pick up ground are the neighborhoods — (step S7).
[0068] As a result of this decision, to the newest omnibus candidate and the 1st group's omnibus candidate,

by the same car 3, when cars cannot be allocated, (step S7->NO) and a computer 11 register the carrying service reservation information of the newest omnibus candidate who received by processing of step S5 as 2nd group's omnibus candidate's carrying service reservation information (step S8), and shift to processing of step S4.

[0069] In the following and step S4-S8 a computer 11 The carrying service reservation information of the omnibus candidate for every group registered into the database 12, The newest carrying service reservation information in the same allocation-of-cars area A1 sent by the user in the standby time is collated. It judges whether the newest omnibus candidate can be allocated by the same car 3 as which group's omnibus candidate. When it is impossible to allocate cars by the same car 3 also in which group, the newest omnibus candidate's carrying service reservation information is registered as new group's omnibus candidate's carrying service reservation information.

[0070] The result of on the other hand having collated the carrying service reservation information and the carrying service reservation information of each group's omnibus candidate which have been transmitted by the omnibus candidate newest by step S4 in step S7, When the same car 3 as a predetermined group's omnibus candidate can be allocated, (step S7->YES) and a computer 11 The carrying service reservation information transmitted by the newest omnibus candidate is memorized in a database 12 as a predetermined group's carrying service reservation information. The optimal operation root for allocating any one of the cars 3 it is running in the car (vacant taxi) 3 which stands by in a waiting circle W1, or the allocation-of-cars area A1 to two or more omnibus candidates of a predetermined group is planned.

[0071] Namely, the currency information of each car 3 in the allocation-of-cars area A1 where a computer 11 includes a waiting circle W1, It is based on of two or more omnibus candidates' of a predetermined group's carrying service reservation information (pick up time, a location, and destination) registered into the road traffic information (the delay information, accident information, work information, etc.) and the database 12 in the allocation-of-cars area A1. The car 3 which can be dropped in at of two or more omnibus candidates' of a predetermined group's pick up time and location is extracted. The optimal operation root, i.e., each omnibus candidate's pick up location in pick up time, While destinations, those arrival time, and a transit path (route) refer to the operation root which is most in agreement with each omnibus candidate's carrying service reservation information for the above-mentioned road traffic information etc., it asks for the arrival time to each pick up location and destination based on the created operation root which carried out planned creation (step S9).

[0072] subsequently, a computer 11 transmits the reservation reception information (image information) containing the existence (is carrying service used at the above-mentioned arrival-time and tariff or not?) selection information and the reservation reception message of the arrival time to the pick-up location and the destination which carried out reading appearance of the tariff corresponding to the number of omnibus in this time, and asked for it, the tariff which carried out reading appearance, and carrying-service utilization to each omnibus candidate's communication equipment 5 through the communications department 10 and a communication network 2, respectively (step S10). [database / 12]

[0073] Drawing 6 shows an example of the reservation reception information displayed on the display of each omnibus candidate's communication equipment 5 by processing of step S10. In addition, the destination arrival time is made and the tariff is made [pick up time] into 450 yen for the pick up location arrival time in drawing 6 at 13:30 for 13:00 minutes on Sun., February 20.

[0074] In drawing 6 , PB4 showing PB3 which means carrying out service utilization as the above-mentioned service utilization existence selection information, and not carrying out service utilization is formed in reservation reception information, respectively, a carriage service user (omnibus candidate) can check the reservation reception information by which the image display output was carried out at communication equipment 5, and it can choose [whether carrying service is used according to a check result, and].

[0075] Namely, if a user (omnibus candidate) is satisfied with the reservation reception result displayed on the display of communication equipment 5 Processing of communication equipment 5 is minded by clicking the service utilization PB3. Service utilization heartless news is transmitted to the reservation reception allocation-of-cars center 4 through processing of communication equipment 5 by transmitting service utilization information to the reservation reception allocation-of-cars center 4, and clicking PB4, in being dissatisfied to a reservation reception result.

[0076] At this time, the computer 11 of the reservation reception allocation-of-cars center 4 It has judged [which of carrying service utilization information and service utilization heartless news, or] whether it is

transmitted from each omnibus candidate (step S11). When carrying service utilization heartless news has been transmitted from at least one omnibus candidate, as a result of this decision (with no step S11 -> utilization) and a computer 11 An omnibus candidate's carrying service reservation information that carrying service utilization heartless news was transmitted is eliminated from a database 12 (step S12). Collating processing with the newest carrying service reservation information sent to processing of step S4 at return and a degree and the carrying service reservation information of the omnibus candidate for every registered group is performed.

[0077] When carrying service utilization information has been transmitted from all omnibus candidates, on the other hand, as a result of decision of step S11 (those with step S11 -> utilization), and a computer 11 The arrival time to each pick up location and destination based on the operation root created by step S9, and the operation root in pick up time It memorizes in a database 12 as schedule information on the corresponding car 3 (step S13). As opposed to the mounted unit 6 of the car 3 which corresponds the schedule information and the cash-basis instruction (cash-basis command which contains the name when at least one PAX has chosen the cash basis) which were memorized It notifies on-line through the communications department 10 and a communication network 2 (step S14), and shifts to processing of step S4.

[0078] A computer 11 re-creates schedule information based on the carrying service information of the omnibus candidate of all the groups in a standby time according to that newest carrying service reservation information, whenever the carrying service reservation information on the newest omnibus hope is received, in order to carry out, whenever processing of step S4-S14 is transmitted to carrying service reservation information from the newest omnibus candidate at this time.

[0079] In namely, the case of processing of step S7 using two pieces of a predetermined group's carrying service reservation information of an omnibus candidate (precedence omnibus candidate) which was once created as omnibus of two affairs and was registered into the database 12, and the newest omnibus candidate's carrying service reservation information When it judges [that the same car 3 can be allocated and] to the newest omnibus candidate and the precedence omnibus candidate of two affairs, (drawing 7 ; step S7 A->YES) and a computer 11 By eliminating the schedule information corresponding to the precedence omnibus candidate of two affairs who once created and registered with the database 12 (step S7B), and performing processing of step S9 The newest carrying service reservation information is memorized in a database 12 as a predetermined group's carrying service reservation information. The optimal operation root for allocating a car 3 to this predetermined group's omnibus candidate of three affairs is planned (step S9A), and processing of step S10 - step S14 is performed.

[0080] Namely, the schedule information containing the arrival time to each pick up location and destination based on the optimal operation root set up with the number of omnibus before reaching the number of the maximum omnibus (this operation gestalt three affairs), and the optimal operation root in pick up time When the newest omnibus candidate who can allocate the car corresponding to the schedule information appears, it is updated by the optimal schedule information for all omnibus candidates' carrying service reservation information, and is notified to the mounted processing unit 6 of the corresponding car 3.

[0081] On the other hand, the controller 24 of the mounted processing unit 6 of a car 3 outputs the operation root containing the arrival time of the pick up location and destination of each omnibus candidate in the pick up time through the information output section 23 based on the schedule information received through the communications department 20 as navigation information.

[0082] Consequently, the driver of a car 3 follows the navigation information (arrival time of the operation root in pick up time, and the pick up location and destination of each omnibus candidate) outputted with one [at least] gestalt of speech information, and images and text. By making it run the self-car 3, in two or more pick up locations, two or more omnibus candidates can be taken up, respectively, and sequential carriage can be carried out to the destination which corresponds the omnibus candidate (PAX) of the above-mentioned plurality in an omnibus gestalt.

[0083] Furthermore, without passing all the stay points P on the operation root M1, since each omnibus candidate's pick up location and destination are grasped beforehand, the driver of the car 3 it is running, for example with the operation gestalt 1 has not received reservation, namely, can carry out the shortcut of the stay point P which is not in a pick up location and the destination relation, and can run the point.

[0084] And when the driver of a car 3 transports each PAX to the corresponding destination, and the tariff settlement-of-accounts command is notified to a certain PAX, it receives the tariff (carriage) corresponding to the number of omnibus from the PAX (drawing 8 ; step S20 ->YES) and directly (step S21).

[0085] When the driver of a car 3 transports each PAX to the destination, and the tariff settlement-of-accounts command is not notified to the PAX, on the other hand, (Step S20->NO), The display-input section 22 is minded for the advice of PAX alighting at the destination. For a controller 24 delivery (step S22) and a controller 24 The advice of PAX alighting at the sent corresponding destination is sent to the computer 11 of the reservation reception allocation-of-cars center 4 through communication network 2 grade (step S23).
[0086] at this time, according to the sent advice of PAX alighting, a computer 11 carries out reading appearance of the corresponding PAX's account number with reference to that carrying service reservation information (step S24), and charges directly automatically the omnibus tariff corresponding to the number of omnibus to the account of a corresponding financial institution based on the account number of a financial institution which carried out reading appearance (step S25).
[0087] Consequently, two or more PAX who wished omnibus can be transported to the destination with an omnibus gestalt with the same car, respectively, and carriage can be taken.
[0088] On the other hand, in independent entrainment (step S2, S5-> "independent entrainment"), it sets the result of decision of step S2, and as a result of decision of step S5. A computer 11 registers the carrying service reservation information (pick up time, a location, and destination) of the independent entrainment candidate who received into a database 12 (step S15). the currency information of each car 3 in the allocation-of-cars area A1 including a waiting circle W1, and the road traffic information in the allocation-of-cars area A1 (delay information --) It is based on an independent entrainment candidate's carrying service reservation information (pick up time, a location, and destination) registered into the databases 12, such as accident information. The car 3 with optimal dropping in at its pick up time and location is extracted, and it asks for the arrival time to the pick up location and destination based on the operation root which created the operation root based on the pick up time, location, and destination, referring to road traffic information etc., and created it (step S16).
[0089] subsequently, a computer 11 transmits the reservation reception information (image information) containing the existence selection information and the reservation reception message of the arrival time from a database 12 to the pick up location and destination which carried out reading appearance of the tariff corresponding to independent entrainment, and asked for it, the tariff which carried out reading appearance, and carrying service utilization to an independent entrainment candidate's communication equipment 5 through the communications department 10 and a communication network 2 (step S17).
[0090] Like an omnibus candidate's case, consequently, on the display of communication equipment 5 Reservation reception information as shown in drawing 6 is displayed. By click actuation of the service utilization PB3 from an independent entrainment candidate a computer 11 The arrival time to the pick up location and destination based on the operation root created at step S16 and the operation root in pick up time is memorized in a database 12 as schedule information on the corresponding car 3 (step S18), and advice processing of the schedule information on step S14 etc. is performed.
[0091] Consequently, the driver of the corresponding car 3 like an omnibus candidate's case The navigation information (arrival time of the operation root in pick up time, and the pick up location and destination of an independent entrainment candidate) outputted with one [at least] gestalt of speech information, and images and text is followed. By making it run the self-car 3, an independent entrainment candidate can be taken up in the pick up location, and the independent entrainment candidate (PAX) can be independently transported to the corresponding destination.
[0092] In addition, in the explanation mentioned above, although carrying service reservation reception processing and allocation-of-cars processing of the user in the allocation-of-cars area A1 by the computer 11 of the reservation reception allocation-of-cars center 4 were explained, also in other allocation-of-cars area A2 and A3, the same carrying service reservation reception processing as the allocation-of-cars area A1 and allocation-of-cars processing are performed. Namely, the carrying service reservation from the user in each area A1 - A3 can be received according to an individual for the allocation-of-cars area A1 - every A3, and the car 3 corresponding to reservation information can be allocated for every area A1 - A3.
[0093] As stated above, according to this operation gestalt, the allocation-of-cars area R is divided into two or more allocation-of-cars area A1 - A3. Two or more cars 3 are made to stand by for the divided allocation-of-cars area A1 - every A3. Reservation of the carrying service from a pick up location to the destination can be received for the allocation-of-cars area A1 - every A3 with the central reservation reception allocation-of-cars center 4, and a car 3 can be allocated according to an individual for every area A1 - A3 corresponding to reception beam reservation information.

[0094] Therefore, by inputting one's location wishing pick up, time of day, destination, etc., a user can reserve the carrying service of a car 3, he can allocate cars, can make a car able to operate at a user's location wishing pick up and time of day, can accumulate, and can raise a user's convenience substantially.
[0095] Moreover, according to this operation gestalt, since allocation-of-cars management of a car 3 is performed for the allocation-of-cars area A1 - every A3, it can respond to a demand of the user for every area promptly, and a user satisfaction level can be raised further.
[0096] Furthermore, the allocation-of-cars approach of the bus mold system of transporting to the destination while happening the allocation-of-cars approach of the taxi mold system which allocates a car 3 according to a carrying service reservation demand (pick up and carriage demand) of a user, and two or more users to ride with this operation gestalt, as mentioned above is combined. And also to the tariff structure, in order to stop at two or more pick up locations and destinations in omnibus carriage, see from the taxi of a bus mold system and it brings close to comparatively cheap carriage. Since it can run to a pick up location and the destination promptly in independent carriage and is bringing close to the carriage of a taxi mold system, An example can be taken from the field of the allocation-of-cars approach, and the field of the tariff structure, the system which employed the advantage of the above-mentioned taxi mold system and a bus mold system efficiently can be built, and efficient management of the carriage system 1 is attained.
[0097] With this operation gestalt, and by processing (refer to drawing 5 R> 5, drawing 7 , and drawing 8) of the computer 11 of communication equipment 5 and the reservation reception allocation-of-cars center 4 and the controller 24 of the mounted processing unit 6 of each car 3 Since reservation reception processing, car allocation-of-cars processing, and tariff **** processing can be performed automatically, without stationing permanently the operator for reservation reception processing, and the operator for allocation of cars at the reservation reception allocation-of-cars center 4, the management cost containing the labor cost of a carriage system can be reduced substantially.
[0098] With this operation gestalt, furthermore, the operation root of each car 3 allocated by each allocation-of-cars area A1 - A3 Since routing is carried out by the reservation reception allocation-of-cars center 4 and it is directed on each car 3, respectively, For example, since it can be made to run the self-car 3 certainly along the directed operation root even when an unfamiliar newcomer's driver operates a car 3 with a surrounding traffic situation, the dependability of the carriage system 1 can be raised further. Moreover, since the operation root is set up the optimal based on road traffic information, such as delay information on each allocation-of-cars area A1 - A3, accident information, and work information, it can prevent the loss of allocation-of-cars time amount, and can raise allocation-of-cars effectiveness further.
[0099] And with this operation gestalt, it does not transport one PAX at a time (every [a lot]) like the operation system by the taxi, without carrying out omnibus. When making a car 3 operate according to the schedule information once planned and created and transporting the PAX [when carrying service reservation enters newly from the new PAX (omnibus candidate) who can transport in an omnibus format by this car 3] the schedule information which re-created the above-mentioned schedule information based on the new PAX's carrying service reservation information, and was re-created — following — the above — since the new PAX can be taken up and transported, the high carriage system of carriage effectiveness can be offered dramatically.
[0100] It sets to the carriage system of this operation gestalt especially. Since the PAX can reserve carrying service from communication equipment, such as a cellular phone and a personal digital assistant, at any time, and can happen to ride in the same same car and can transport the PAX of plurality (two or more sets), It becomes possible to abolish existence of the car group of other carriage systems which constitute a train at current, a station, etc. and carry out the PAX's entrainment waiting, or to reduce the number substantially, and can contribute to prevention of the traffic congestion resulting from existence of the above-mentioned car group, prevention of useless fuel consumption, and an emissions cut.
[0101] On the other hand, in the carriage system of this operation gestalt, since a user can choose the tariff structure corresponding to two or more operation approach (independent entrainment, omnibus) and two or more of its operation approaches himself, he can receive offer of the optimal carrying service according to his situation by choosing independent entrainment, when hurrying to the destination, and choosing omnibus, when not hurrying so much.
[0102] Furthermore, the user located in the allocation-of-cars area which is the limited field divided from the allocation-of-cars area R in the carriage system of this operation gestalt is received. Since a user can be beforehand notified of the pick up time of day in the pick up location specified by a user even if the latency

time chooses omnibus few, since the car 3 which exists in the same allocation-of-cars area is allocated, a user can grasp his latency time beforehand.
[0103] Therefore, the latency time in a bus stop like the system by the conventional bus is lost, and the carriage system 1 can be used in comfort according to its schedule.
[0104] In addition, although the carriage service user reserved carrying service with this operation gestalt using communication equipment, it is also possible for this invention not to be limited to this and to perform carrying service reservation by call toing a car to stop by the road side like a taxi in addition to the reservation using the above-mentioned communication equipment.
[0105] In this case, it is also possible for a user to operate the communication equipment of a pocket mold and to send carrying service reservation information to a reservation reception allocation-of-cars center, and it is also possible for a driver to operate the display-input section based on the carrying service reservation information uttered from the user, and to transmit the above-mentioned carrying service reservation information to a reservation reception allocation-of-cars center through processing of the controller for mount and the communications department.
[0106] In the carriage system of this operation gestalt, although it was made to carry out reservation reception processing, car allocation-of-cars processing, etc. automatically, without stationing an operator permanently at a reservation reception allocation-of-cars center, of course, it is possible also in carrying out reservation reception and allocation-of-cars processing by the voice dialogue which the above-mentioned operator was stationed permanently and minded in the communication equipment between an operator and a user and between an operator and a driver (for example, a telephone etc.).
[0107] Moreover, the speech recognition processing program and the automatic voice guidance transmitting program can be made to be able to build in the computer 11 of a reservation reception allocation-of-cars center, and a reservation receptionist can also be performed when a user recognizes automatically the speech information uttered according to the automatic voice guidance which flows from the communication equipment 5, such as telephone 5b.
[0108] Furthermore, in the carriage system concerning this operation gestalt, the reservation reception allocation-of-cars center 4 side can perform reservation reception processing as the modification based on the speech information uttered from the user, without [without it stations an operator permanently at a reservation reception allocation-of-cars center, and] using a speech recognition program.
[0109] That is, the call device (in this modification, it considers as a cellular phone) 30 which that driver can voice talk over the telephone is carried in each car 3 in carriage system 1A concerning this modification, and the computer 11 has managed the telephone number of each of this cellular phone 30 every car 3.
[0110] In order that the user H who has a house in a certain allocation-of-cars area (for example, allocation-of-cars area A1) may reserve carrying service at this time, communication equipment 5 (telephone 5b) is used for the reservation reception allocation-of-cars center 4 from a house, and it telephones.
[0111] If the call signal based on a telephone is transmitted to the computer 11 of the reservation reception allocation-of-cars center 4 through communication network 2 grade at this time, according to that call signal, a computer 11 will detect the location of the call signal dispatch origin in the allocation-of-cars area A1 (step S30), and will take up the car 3 which is running the location nearest to that sending agency detection location (step S31).
[0112] Subsequently, a computer 11 transmits the above-mentioned call signal to the cellular phone 30 of the car 3 which took up (step S32).
[0113] At this time, when the driver of the pickup car 3 performs call actuation according to the call signal emitted from a cellular phone 30, a driver converses with a user with voice and recognizes the carrying service reservation information uttered from the user (step S33).
[0114] Then, a driver operates the display-input section 22, communicates with the reservation reception allocation-of-cars center 4 by processing of the controller 24 grade for mount, and displays Screen I for carrying service reservation on the monitor of the display-input section 22 by processing of this controller 24 (step S34).
[0115] And a driver operates the display-input section 22 and transmits the carrying service reservation information that a user's carrying service reservation information was inputted and inputted, in the reservation reception allocation-of-cars center 4 through a communication network 2 on Screen I for carrying service reservation (drawing 5 ; step S1 reference).
[0116] Hereafter, processing of step S1 of above-shown drawing 5 - step S12 is performed, and reception

processing of the carrying service reservation information which the user uttered is carried out in the reservation reception allocation-of-cars center 4.
[0117] Moreover, in processing of step S10 of above-shown drawing 5 - step S11, the computer 11 of the reservation reception allocation-of-cars center 4 sends reservation reception information to each omnibus candidate as speech information uttered from a driver through the cellular phone 30 of the communications department 10, a communication network 2, and a car 3.
[0118] And a driver recognizes by the voice dialogue through the cellular phone 30 of the corresponding car 3, a computer 11 changes a recognition result into the signal in which read is possible by processing of a controller 24, and the answerback (service utilization information / service-utilization-less information) from each omnibus candidate is also sent to the computer 11 of the reservation reception allocation-of-cars center 4 through the communications department 20 and a communication network 2.
[0119] That is, holding down low the management cost containing the labor cost of the reservation reception allocation-of-cars center 4, since carrying service reservation information with the voice from a user is receivable according to this modification, fully automating the reservation reception allocation-of-cars center 4 without stationing an operator permanently, reservation of the carrying service can be received by the voice dialogue by telephone 5b which gets used most and is familiar, and a subscriber can raise a subscriber's convenience.
[0120] In addition, this modification is not applied only to the carrying service reservation by the car.
[0121] For example, also in the reception processing system which receives the service request, it is applicable by sending service requests, such as boarding reservation of a passenger transport, reservation of a concert ticket, and a goods purchase application, to a reception center with voice through a telephone etc.
[0122] Namely, by covering two or more areas beforehand, securing a fixed number of call personnel equivalent to the above-mentioned driver, and arranging the computer terminal When a reception center is fully automated and the call signal for service requests is transmitted to a reception center, a reception center It can tell the call personnel who took up a user's service request by pinpointing the location of the dispatch origin, taking up the call personnel nearest to the location according to the transmitted call signal, and transmitting the above-mentioned call signal to the call personnel who took up.
[0123] Hereafter, it is transmitted to the reception center, and the information (data) that the reception center showing the service request transmitted by computer terminal actuation of the call personnel who told the service request can be recognized is automatically recognized and registered by the reception center.
[0124] Thus, also in the reception processing system concerning this modification, since speech information can be electronized and reception processing can be carried out, using people with work of above others, or a housewife in PERT/TIME, without stationing permanently the operator for reservation reception under exclusive contract at a reception center, the management cost containing the labor cost of a speech information reception processing system can be reduced.
[0125] In addition, although the carrying service reservation information on audio was inputted in this modification as a signal which can recognize the reservation reception allocation-of-cars center 4 (computer 11) by inputting a user's carrying service reservation information on Screen I for carrying service reservation This invention is not limited to this, and assigns the alphabetic character etc. beforehand to each push-button phone carbon button of a cellular phone 30, and its combination, and you may make it input the above-mentioned carrying service reservation information into the reservation reception allocation-of-cars center 4 by push button actuation of a driver.
[0126] Moreover, in this operation gestalt and its modification, although the allocation-of-cars area was divided into three and each was made into allocation-of-cars area, it is also possible to consider as independent allocation-of-cars area, without not limiting this invention to the above-mentioned number of partitions, and dividing.
[0127] Furthermore, in this operation gestalt and its modification, although the number of the maximum omnibus was made into three affairs (3 sets), it is also possible for this invention not to be limited to the number of the maximum omnibus, and to accept further much omnibus depending on the magnitude of a car.

[Translation done.]

* NOTICES *

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1] The block diagram showing the outline configuration of the carriage system concerning the gestalt of operation of this invention.
[Drawing 2] Drawing showing the allocation-of-cars area and allocation-of-cars area concerning this operation gestalt.
[Drawing 3] Drawing showing the basic operation root in the allocation-of-cars area shown in drawing 2 .
[Drawing 4] Drawing showing the screen for carrying service reservation displayed on the display of a terminal.

[Drawing 5] The outline flowchart which shows the computer of the reservation reception allocation-of-cars center shown in drawing 1 , and an example of processing of communication equipment.
[Drawing 6] Drawing showing an example of the reservation reception information displayed on the display of each omnibus candidate's communication equipment.
[Drawing 7] The outline flowchart which shows an example of processing of the computer of the reservation reception allocation-of-cars center shown in drawing 1 .
[Drawing 8] The outline flowchart which shows an example of processing of the computer of the reservation reception allocation-of-cars center shown in drawing 1 and the controller of a mounted processing unit.
[Drawing 9] Drawing showing the outline configuration of the carriage system concerning the modification of the operation gestalt of this invention.
[Drawing 10] The outline flowchart which shows an example of processing of the computer of the communication equipment of the carriage system shown in drawing 9 and a reservation reception allocation-of-cars center and the controller of a mounted processing unit.
[Description of Notations]
1 1A Carriage system
2 Communication Network
3 Car
4 Reservation Reception Allocation-of-Cars Center
5 Communication Equipment
5a Terminal
5b Telephone
6 Mounted Processing Unit
7 Control Center
10 20 Communications department
11 Computer
12 Database
13 Bus
21 Location Receive Section
22 Display-Input Section
23 Information Output Section
24 Controller for Mount
30 Cellular Phone

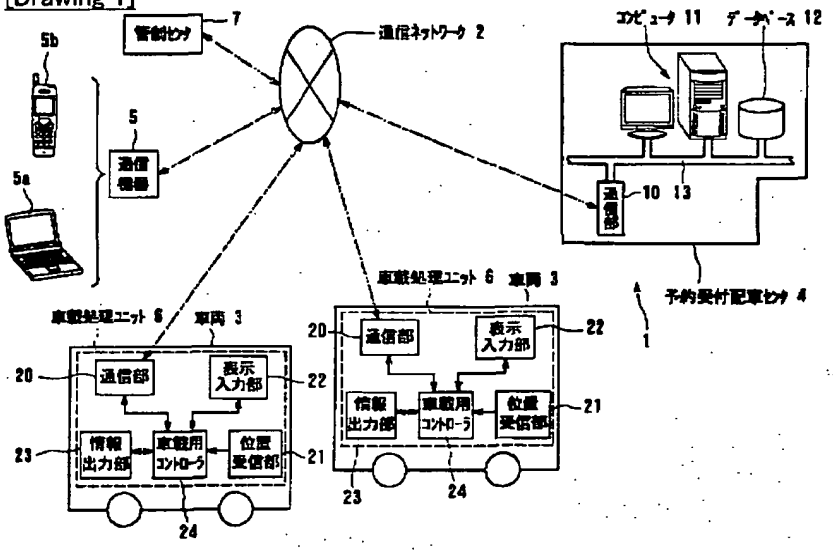
[Translation done.]

* NOTICES *

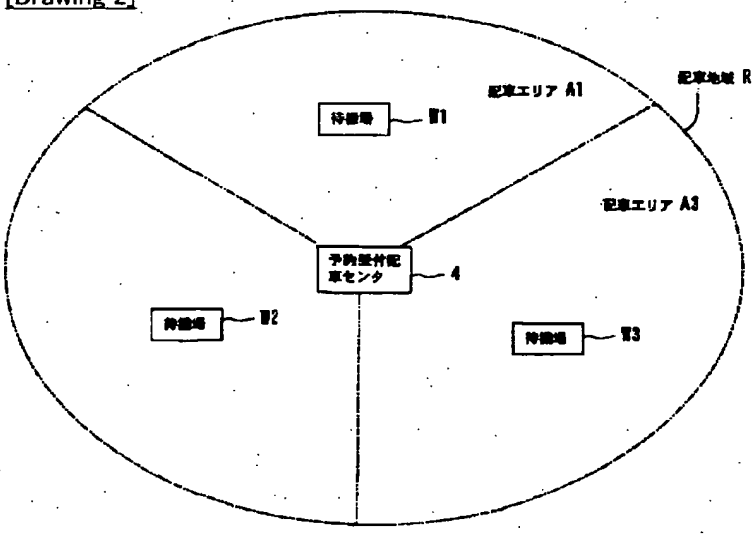
1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

DRAWINGS

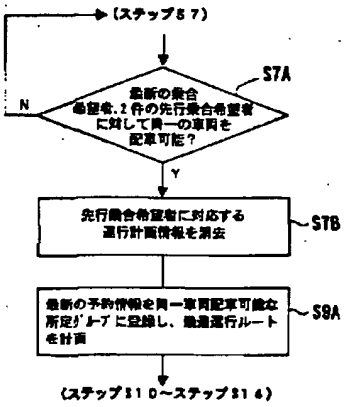
[Drawing 1]



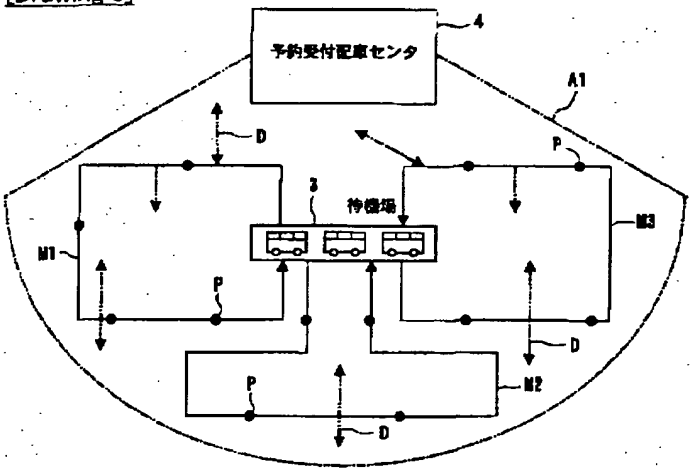
[Drawing 2]



[Drawing 7]



[Drawing 3]



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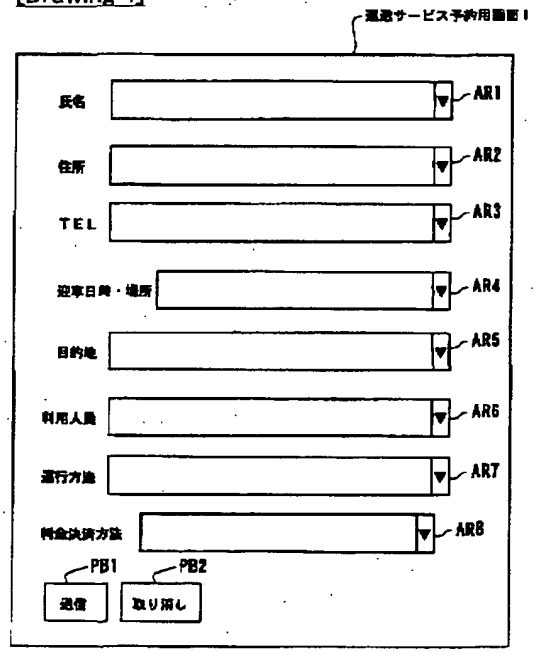
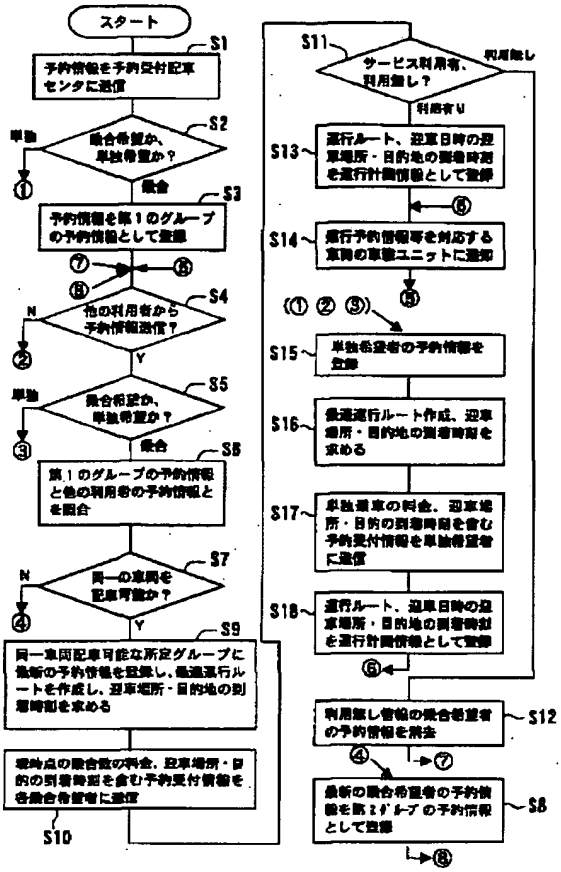
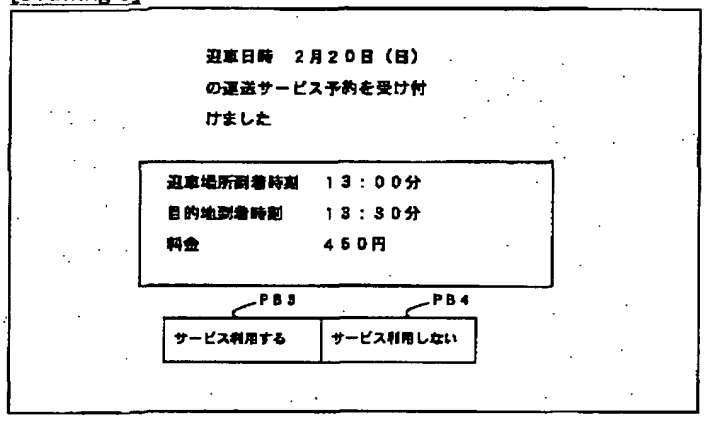


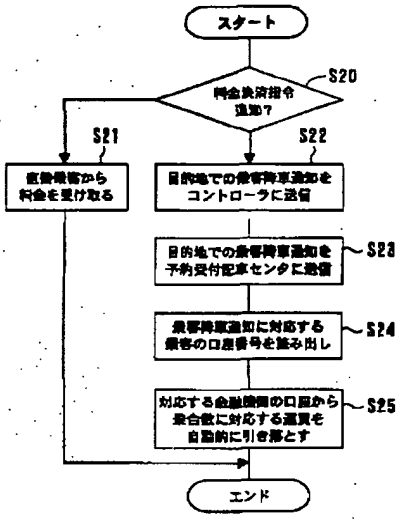
[Drawing 5]



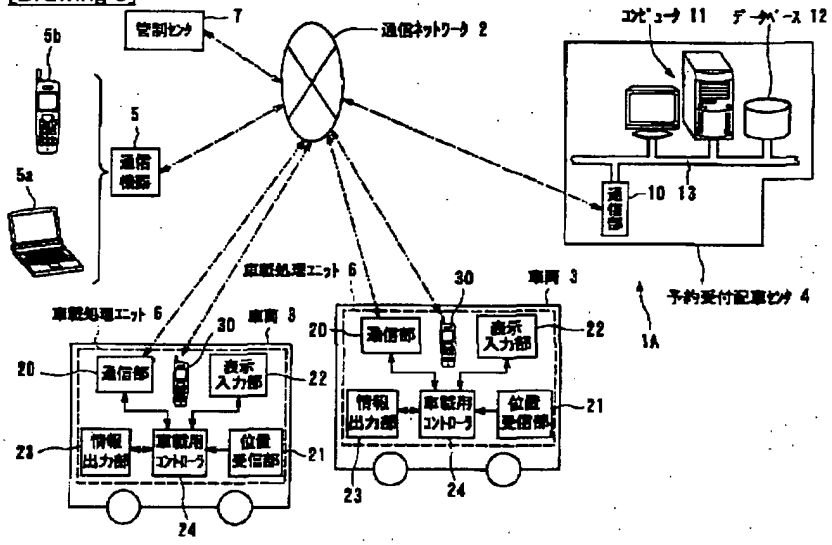
[Drawing 6]



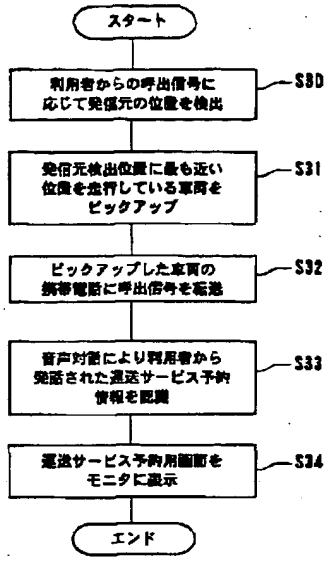
[Drawing 8]



[Drawing 9]



[Drawing 10]



[Translation done.]